THE
MONTHLY REVIEW,
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ART. I. *An Account of Travels into the Interior of Southern Africa.* In which is considered, the Importance of the Cape of Good Hope to the different European Powers, as a Naval and Military Station, as a point of Security to our Indian Trade and Settlements during a War, and as a territorial Acquisition and Commercial Emporium in Time of Peace: with a statistical Sketch of the whole Colony; compiled from authentic Documents. By John Barrow, Esq. late Secretary to the Earl of Macartney, Auditor-General of public Accounts at the Cape of Good Hope, and Secretary to Lieutenant-General Francis Dundas during his Government there. Volume the Second. Illustrated with several Engravings. 4to. pp. 452. 1l. 15s. Boards. Cadell and Davies. 1804.

THE commendation which we formerly bestowed on the author of this work, in reviewing his first volume *, for the variety and extent of his information, and for the pleasant mode in which it was communicated, has been ratified by the opinion of the literary world. It seems to us, however, on the present occasion, that Mr. Barrow has been too conscious of the rank which he holds in general estimation; since he has taken liberties which would not have been hazarded by a writer who was distrustful of his abilities, and who was appearing for the first time before the formidable tribunal of the public. He treats it, indeed, with so little respect, that he tells us in the outset that this volume, consisting of 452 pages, was composed in four months; and the knowlege of this cause did not allay the vexation and weariness which we repeatedly felt, from the repetitions and the diffuseness which very essentially diminish the value of this additional performance.

The chief motive for this publication originated in a wish to afford precise and ample grounds for the determination of a question, even now agitated, whether the possession of the Cape of Good Hope is important to the interests of the British

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* See Rev. Vol. xxxv. N. S. p. 337.

empire; and since the documents now before us prove, by so evident a preponderance of argument, the great utility of that colony to our interests, we cannot but regret that they did not appear before that settlement passed out of our hands. The fate of war, however, may again subject it to our power; and, in a second negotiation, it may be considered as equally valuable with Malta or Trinidad.

The nature of our contest with France, without disjointing parties, has united all individuals in a zealous and vigorous preparation for resistance against the common enemy. No one indeed can view its large and day-light robberies, or its foul and mid-night murders, without abhorrence! but, as the sentiment of abhorrence is so general, this author might have been excused if he had suppressed it; if he had been contented merely to point out the road for political wisdom to pursue, calmly and without passion; and if he had taught us how 'France and Frenchmen may be kept in awe,' without any sarcastic remarks on Gallic perfidy or Consular despotism.

Mr. Barrow confirms the maxim which is now very generally believed, that no circumstances ever estrange a Frenchman from his country: that to serve it, whether under a king, or directors, or consuls, or an emperor, he unremittingly uses his eyes and his ears; and that to promote its aggrandizement, he will forget the dictates of honor and the duties of gratitude.

'Hence we find, (says Mr. B.) in every part of the world, Frenchmen labouring for the interests of their nation, in the various characters of ambassadors to the court, missionaries for propagating the Christian religion, commissaries of commerce, emissaries of a subordinate rank, and voluntary adventurers. A Frenchman, travelling in foreign countries, generally combines national with individual views. Since the late revolution they have been dispersed, like the Jews, over the whole world; but their dispersion is yet too recent to have obliterated the *amor patriæ* which, next to that of the ties of blood, clings, perhaps, closest to the heart. To their usual propensity for intrigue at foreign courts, and their national enmity against England, the emigrants have now the additional spur of doing something that may recommend them to the notice of their country.'

The author then adverts to the intrigues of the French in India, China, &c.; which we see no reason to question, but which are here presented without proof.

Mr. B. produces abundant testimony of the paucity and imperfection of our knowlege respecting the Cape at the time of its capture by us. Not a survey of one of the bays could be implicitly adopted: the direction and distance of Graaf Reynet was unknown: at first it was said that the three country districts could

could raise a militia of cavalry of nearly 20,000 men; whereas in the whole settlement, men, women, and children, white inhabitants, do not much exceed that number; and wheat was supposed to be produced in such abundance, that a cargo out of the captured store was sent to England, and the following year was witness to a famine. Geographical errors equally glaring are also stated. Sparrmann, in one instance, makes an error in latitude of between two and three hundred miles: the defective map of Sparrmann was republished by Paterson; and in a partial map of the colony by De la Rochette, *four and twenty* rivers are made to flow in directions opposite to their real courses. In speaking of M. Le Vaillant, Mr. B. says:

'With regard to the last-mentioned gentleman, I should not have noticed his map had he not endeavoured to impress the world with an idea of the great pains that were taken in collecting the materials, and of the assistance he afterwards received, and the attention that was bestowed, in putting them together. And in order to add force, as he supposes, to the value of his observations, with a pretended zeal for the cause of humanity (pretended because he knew that every line in his chart was false), he breaks out into the following apostrophe: —"Had my voyage been productive of no other good than that of *preventing a single shipwreck*, I should have applauded myself during my whole life for undertaking it!" The fact is, he has done little more, in the eastern part of his map, than copy from Sparrmann; and the whole to the northward of Saint Helena Bay is a work of fancy. Two instances will be sufficient to shew how very little he is to be trusted. He places Camdeboo, and the beginning of the Snowy Mountains, in the latitude of about 28° south, instead of 32° 15′ south, an error of more than 290 English miles! And he makes the Orange River *descend* from the northward, nearly parallel to the coast, which, in fact, takes its rise near the eastern coast, and *ascends* towards the north-west. Messrs. Truter and Somerville, who two years ago penetrated farther into the interior of Southern Africa than any Europeans had ever done before, calculated that they crossed this river in about 29° 0′ south, and between 23° and 24° east of Greenwich. I skirted its banks from 29°40′ to 30° 15′ south, and between the longitudes of 25° 45′ and 26° 30′ east, which shews, as I said before, that its course is north-westerly. *Monsieur Le Vaillant* cannot be offended at my pointing out his mistakes, as he himself has observed, that "a traveller ought to conceal nothing that may lead to error in the sciences." Besides, I feel myself called upon to answer a charge, preferred against me by *Monsieur Grandpré*, the translator of my former volume, that I have attempted to invalidate the truth of *Monsieur Le Vaillant*'s work, *because it was from the pen of a Frenchman.* I can very seriously assure *Monsieur Grandpré*, that he is mistaken; that I consider the work of *Monsieur Le Vaillant* as replete with valuable matter, and ingenious observations; but they are so jumbled together with fiction and romance, that none but those who have followed his steps can pretend to separate the one from the other.'

If, in some future period, we resolve on having possession of the Cape, it will not be on account of the largeness and the value of its productions. On these grounds, it certainly is not very desirable; and this author, a *strong Cape-man*, states its physical disadvantages with great appearance of impartiality. The soil, in some seasons, labours excessively with drought: but this evil might, as Mr. B. suggests, be in some degree remedied by planting trees, and inclosing the country. The want of springs, however, is too severely felt; and this circumstance renders the best Bay in the colony useless for shipping. The reason assigned by the author for this scarcity of springs appears to us very ingenious and just, and it also points out the plan to be adopted in procuring water:

'All the continued chains of mountains in Southern Africa are composed of sandstone resting upon a base of granite. This granite base is sometimes elevated considerably above the general surface of the country, and sometimes its upper part is sunk as far beneath it. In situations where the former happens to be the case, numerous springs are sure to be found, as in the instance of Table Mountain, where, on every side, copious streams of pure limpid water, filtered through the immense mass of superincumbent sandstone, glide over the impenetrable surface of granite, furnishing an ample supply to the whole town, the gardens, and the adjacent farms. But in all those places where the sandstone continues to descend below the surface, and the upper part of the granite base is sunk beneath the general level of the country, the springs that make their appearance are few and scanty.

'The reasoning that suggests itself on these facts will lead to the following conclusion:—that the cisterns or cavities in the sandstone mountains, being corroded and fretted away, in the lapse of ages, to a greater depth than the openings or conduits which might, perhaps, at one time have given their waters vent, the springs can no longer find their way upon the surface, but, oozing imperceptibly between the granite and the sandstone, below the general level of the country, glide in subterraneous streams to the sea.

'I am the more inclined to this opinion from the experience of several facts. When Admiral Sir Roger Curtis directed a space of ground, between the Admiralty-house and the shore of Table Bay, to be inclosed as a naval yard, the workmen met with great impediment from the copious springs of pure fresh water that rushed out of the holes, which they found necessary to sink in the sand, for receiving the upright posts. It is a well known fact, that on almost every part of the isthmus that connects the mountainous peninsula of the Cape to the continent, fresh water may be procured at the depth of ten or twelve feet below the sandy surface. Even in the side of the Tyger Hills, at an elevation of twenty feet, at least, above the general surface of the isthmus, when the workmen were driving a level in search of coal, a copious stream of water was collected within it in the month of February, which is the very dryest season of the year. And on

boring, for the same purpose, on Wynberg, they came to a rill of water at the depth of twenty feet below the surface.'

The second chapter, the only one of this volume which contains *narrative*, is intitled *a military expedition to the Kaffer country*. The detail is interesting, but not very important. It contains proofs, however, if proofs were wanting, of the indolence, ignorance, and diabolical barbarity of the Boors. They are indecent, ferocious, unwieldy, disgusting in outward form and inward mind; and the many recorded instances of their brutality continually excite in us and cherish the hope, that the Cape may be found beneficial to the interests of this country, that policy may be on the same side with humanity, and that the Hottentot may be delivered from his Dutch master. In fact, the Hottentots would assist us in the defence of the colony. Sir James Craig found that they made excellent soldiers, tolerably clean, neither roving nor drunken; and though their collective courage was not put to a trial, individually they are not deficient in that quality. A Dutch Boor is indeed bolder than the Hottentot, but only when the former has a gun, and the latter is unarmed.

To the great honor of our people while at the Cape, they protected the Hottentots; who, on every account, seem to be the best production in the form and features of men, of which the colony can boast. Something like justice was administered; murder (for a Boor feels not much compunction in murdering a Hottentot) was repressed; and the cruelty displayed by a Boor was punished, to his no small astonishment and indignation. We select a passage on this subject, which will not be read without emotion:

'The next house we halted at upon the road presented us with a still more horrid instance of brutality. We observed a fine Hottentot boy, about eight years of age, sitting at the corner of the house, with a pair of iron rings clenched upon his legs, of the weight of ten or twelve pounds; and they had remained in one situation for such a length of time, that they appeared to be sunk into the leg, the muscle being tumefied both above and below the rings. The poor creature was so benumbed and oppressed with the weight, that being unable to walk with ease, he crawled on the ground. It appeared, on inquiry, that they had been rivetted to his legs more than ten months ago. What was to be done in a case of such wanton and deliberate cruelty? It was scarcely in human nature to behold an innocent boy for ever maimed in so barbarous a manner; and at the same time to look upon the cold blooded perpetrator without feeling a sentiment of horror mingled with exasperation,—a sentiment that seemed to say it would serve the cause of humanity to rid the world of such a monster. The fellow shrunk from the inquiries of the indignant General; he had nothing to allege against him but that he had always been a worthless boy; he had lost him so many sheep; he had slept when he ought to

watch the cattle, and such like frivolous charges of a negative kind; the amount of which, if true, only proved that his own interest had sometimes been neglected by this child.

'Determined to make an example of the author of such unparalleled brutality, the General ordered him instantly to yoke his oxen to his waggon, and, placing the boy by his side, to drive directly to head-quarters. Here he gave orders to the farrier of the 8th regiment of Light Dragoons to strike off the irons from the boy, an operation that required great nicety and attention, and to clench them as tight as he could on the legs of his master, who roared and bellowed in a most violent manner, to the inexpressible satisfaction of the by-standers, and, above all, to that of the little sufferer just relieved from torment. For the whole of the first night his lamentations were incessant; with a Stentorian voice a thousand times he vociferated, "*Myn God! is dat een maniere om Christian mensch te handelen!*" "My God! is this a way to treat Christians!" His, however, were not the agonies of bodily pain, but the bursts of rage and resentment on being put on a level with one, as they call them, of the *Zwarte Natie*, between whom and the *Christian Mensch* they conceive the difference to be fully as great as between themselves and their cattle, and whom, indeed, they most commonly honour with the appellation of *Zwarte Vee*, black cattle. Having roared for three days and as many nights, at first to the great amusement, but afterwards, to the no less annoyance, of the whole camp, he was suffered to go about his business on paying a heavy penalty in money for the use of the boy, whom he had abused in so shameful a manner.'

Along the banks of the Sunday-River, the British party fell in with a great number of Kaffers, under the command of a chief called Congo, flying from the territories and power of the Kaffer king Gaika. This retreating party having encroached on the limits of the colony, an interview with the chief was requested, in order to urge him to quit the territory which (in some way or another,) is made to belong to Europeans; and the Kaffer chief, at the head of thirty of his people, each armed with a hassagay or spear, approached the British troops:

'On being told how necessary it was, for the sake of preserving tranquillity, that he should quit his present station among the boors, he replied, with great firmness, that the ground he then stood upon was his own by inheritance, for that his father had been cheated out of it by a Dutch Landrost of Graaf Reynet; that, however, being desirous of remaining in friendship with the English, he would remove eastward in the course of three days; but that it was impossible for him to cross the Great Fish River, as there was a deadly hatred, or, as he expressed it, *there was blood between Gaika and himself*; and that Gaika was then much too powerful for him.

'The decided tone in which he spoke, at the head of his small party, when surrounded by British troops; his prepossessing countenance, and tall muscular figure, could not fail to excite a strong interest in his favour. An open and manly deportment, free from suspi-

suspicion, fear, or embarrassment, seems to characterize the Kaffer chiefs. Though extremely good-humoured, benevolent, and hospitable, they are neither so pliant nor so passive as the Hottentot. The poorer sort are sometimes led to seek for service among the boors, and engage themselves for so many moons in consideration of so many head of cattle; and they never suffer themselves to be duped out of their hire like the easy Hottentots. The conversation with Congo ended by recommending him to withdraw his people and their cattle from the banks of the Sunday-River, to which he gave a kind of reluctant assent.

'The whole of the party that accompanied this chief were tall, upright, and well made men; affording a clear proof that animal food is by no means necessary to promote the growth of the human species; or to add strength of fibre to the muscular parts of the body.'

Instigated by certain rebellious Boors, the brave Kaffers ventured on the rash attempt of attacking the British camp under General Vandeleur: but they were repulsed with loss. It is remarkable that, after the conflict had continued some time, the Kaffers, finding their missile weapons of no use, broke their hassagays, and rushed forwards to the combat with the iron part only in their hands.

The gloom and the sorrow, which prevailed on the evacuation of the Cape by our people, strongly testified their kind and just conduct. Of the troops who, after their departure, took possession of the Cape, half the officers were Frenchmen; and probably their conduct will not steal the affections of the colonists from the British: for difference of latitude will not cause much alteration in the moral conduct of a Frenchman, who will be rapacious whether at Hanover or at Cape Town. We apprehend, however, that these French officers will make the second capture much more difficult to us than we found the first.

Chapter III. treats on the importance of the Cape of Good Hope, considered as a military station. On this point, there have been and still are many various opinions. It is something, in the way of argument, that the ministry of this country, who have recourse to the best documents, have esteemed this post important; and it has been styled the Defence of the East Indies: but, on the other hand, the East India Directors, whose interest ought to make them judge rightly, hold it cheap;—of late, they have not even used it as a half-way house, and have ordered their ships not to touch at it. An English crew, Mr. Barrow observes, can bear the whole voyage without a halt: but, when the crew is composed of Lascars, who require fresh provisions, it is almost indispenssably necessary for their health to stop at the Cape. It can

scarcely be denied that this settlement, in the possession of our enemies, would afford them the means of greatly annoying our trade; and in former wars, the celebrated Suffrein went thither after his actions, to refit and revictual his ships. The French do not now seem ignorant of its consequence; and Mr. Barrow detects, in the late negotiation, a great but suppressed solicitude on their part to have the Cape restored: they said very little about it, indeed, and appeared to consider it as of trivial moment: but this was political finesse and adroitness; and they blustered about other things, and other places, for which in reality they cared little. If we now look to the composition of the garrison, we must grant that the Cape was really ceded to France.

According to Mr. B.'s account, this station is admirably fitted to season troops; since it is very healthy, provisions are plentiful, and a few months' residence there enables soldiers to bear the Indian climate extremely well. Very convenient drafts were recently made from our force at the Cape, to Egypt and India; and the expedition under Sir Home Popham is said not to have lost a man by sickness.

Though we do not precisely understand Mr. Barrow's calculations, which state that the English government made large savings by issuing paper money, and by deducting, on the score of rations, from the pay of the soldiers, yet the Cape is clearly the cheapest place, at present known, for merely subsisting a military force. The price of butcher's meat is two-pence per pound, bread a penny, and a pint of sound wine may be bought for three pence. Mr. B. thinks that, from the expence of the colony, the pay of the garrison, which must subsist somewhere, ought to be deducted: but this is not an exact statement: had we retained possession of the Cape, the garrison (6000 or 7000 men) must have been a created force, additional to our present, and consequently the whole cost of maintaining it would have been a charge on government. The expence of a garrison of 5000 men, from an average of seven years, is 255,597*l.* After having made the above gratuitous deduction for the maintenance of the garrison, Mr. Barrow says:

'There is little reason, therefore, in reality, for considering the Cape in the light of an expensive settlement. In fact, the sums of money, that have been expended there, dwindle into nothing upon a comparison with some of the West India Islands, whose importance are a feather when weighed against that of the Cape of Good Hope. Viewing it only as a point of security to our Indian possessions, and as a nursery for maturing raw recruits into complete soldiers, the question of expence falls to the ground. Of the several millions

millions that are annually raised for the support of government at home, and its dependencies abroad, a small fraction of one of these millions may surely be allowed for the maintenance of a station whose advantages are incalculable.

'But the article of expence, trifling even in war, could be no object whatsoever in time of peace. The fortifications, which were in the most ruinous condition when the place was taken, being finished in a complete manner, would require no further expence than that of merely keeping the works in repair, which might amount, perhaps, to an annual sum of five thousand pounds. The contingencies and extraordinaries of the army could not, at the utmost, amount to twenty thousand pounds; so that twenty five or thirty thousand pounds would be the extent of the contingent and extraordinary expences of the Cape in time of peace; a sum that, by proper management, and a prudent application of the revenues of the colony, might easily be defrayed out of the public treasury there, and leave a surplus adequate to all the demands of the civil department, together with the necessary repairs of public works and buildings.'

The strength of the Cape is particularly described. There are but few points which it is necessary to defend: but, as to a landing, that may always be effected. Mr. B. thinks that an army of 10,000 men could not prevent it.

Chapter ivth considers the Cape of Good Hope as a naval station.—A fleet at this port may very cheaply be provided with beef, wine, and spirits. It is a convenient place for ships in distress; almost necessary as a half-way-house, for ships manned with Lascars, or for transports carrying out raw soldiers to the East Indies; and it enabled our fleet to clear the Indian Sea of privateers. As for its geographical advantages, let us attend to Mr. Barrow:

'The geographical position of the Cape of Good Hope throws a vast weight into the scale of its importance to England. Its happy situation, with regard to climate, and the productions of the soil, stamp its value as a depositary of troops and seamen; and its relative position on the globe enhances that value by the ready communication it commands with almost every part of the world. We have seen with what expedition more than two thousand troops were thrown from hence into India, to the very walls of Seringapatam; and, on another occasion, twelve hundred effective men into Egypt. With equal facility and dispatch could the same, or a greater, number have been conveyed to the east coast of North America, the West India islands, or the west coast of South America. At a month's notice, the whole coast of Brazil could be lined with cruizers from the Cape. The whole eastern coast of Africa, and the various islands contiguous to it, are at the mercy of the power who holds the Cape; and the large island of Madagascar may be approached in ten or twelve days, those of France and Bourbon in much less than a month, the Red Sea in five or six weeks, and the coasts of Malabar and Coromandel in seven or eight weeks. These passages will certainly

tainly depend much on the season of the year in which they are made, but when this is properly chosen, the different places may be arrived at within the periods here mentioned.

'If, at any time, troops might be wanted in the West Indies, the homeward-bound East Indiamen might be employed to transport them thither from the Cape without retarding their passage more than sixteen or eighteen days, as the common practice of crossing the line is now as far to the westward as 26° west longitude. Detachments of the Hottentot corps would be well calculated for service in the West India islands. Should, at any future period, the French resume their projects on India by the Red Sea (which they will certainly not fail to do whenever an opportunity presents itself), in three months from the time it was first known in England, a force from the Cape might be in possession of the straits of Babelmandel, and, by thus anticipating, completely frustrate their designs, which, with the Cape in their possession, or in that of the Dutch, they might easily accomplish.'

Mr. B. again and again urges (what, we think, cannot occasion much doubt) the annoyance which our trade would experience if the Cape, together with the Isles of France and Bourbon, were in the hands of the enemy. He admits, with Lord Macartney, that Ceylon, for its excellent harbour of Trincomalée, is of more value than the Cape: but he quotes an opinion of that noble Lord, to shew that the Cape would be a powerful instrument in the hands of France for the recovery of Ceylon.

Chapter v. discusses the importance of the Cape of Good Hope, considered in a commercial point of view, and as a depôt for the Southern Whale Fishery. With some speculation not very interesting, this chapter contains much useful information respecting the productions of the colony. The value of these productions, without alteration, will never tempt our avarice; since, as the author remarks:

'The obvious conclusion to be drawn from the view now taken of the amount of exports in colonial produce is, that the Cape of Good Hope, in its present condition, is of very little importance to any nation, considered as to the articles of commerce it supplies for exportation to foreign markets. The surplus produce, beyond the supply of its own inhabitants, a garrison, and navy of eight or ten thousand men, and the refreshments furnished to ships trading and casually calling there, is so trifling as to merit no consideration. But that, by a new system of things, is susceptible of great improvement; and the supply of the most important articles, of being extended to an almost indefinite amount.'

Mr. Barrow then states the imports, and shews that five-sixths of the trade of the Cape of Good Hope were occasioned by the consumption of the garrison and navy; and consequently,

except

except a considerable garrison be stationed there, or some other channel be opened, the colonists, who have increased their capital, will be in worse circumstances than they were before the capture.

In the last chapter, which includes a topographical and statistical account of the Cape, we are surprised to find so small a population given to the colony; viz. 60,000 persons only in 120,000 square miles. This is a most striking instance of bad policy and internal mis-management, since food is in abundance: in *too great* abundance, according to the author, because by nurturing indolence it checks the desire of improvement.

In order to augment the riches of the colony, Mr. B. proposes to introduce ten thousand Chinese: not to toil as slaves, but to be endowed with small portions of land. Such labourers, consequently, would feel an interest in the improvement of their property; and the true, genuine, beneficial spirit of industry would be excited.

A second plan, more easily carried into execution, and more on a level with the common notions of society, is to inclose many of the Cape lands, and to plant them: by these means, moisture would not be so easily dissipated as it is at present, and the violent scorching of the soil would in some degree be prevented.

The inhabitants of the Cape are extremely fond of buying and selling; and this disposition is favourable to the revenue, since a tax of 5 per cent. is imposed on all sales. They are moreover excessively litigious; and justice, taking the colony throughout, is most imperfectly administered. The clergy are well maintained, and are held in respect; they are paid by government, not by any tax or tythe.

In the beginning of the article, we expressed our general opinion of this production, and little more is requisite to be added. It abounds in information, various and extensive; and we have no grounds for doubting its accuracy: but this information ought to have been compressed within narrower limits. We are not vociferous for imaginary perfection: but, according to the author's own confession, he has bestowed very little time on putting his work into proper order; and in truth it is at present somewhat like his Boor of the Cape, fat and unwieldy.

Mr. Barrow has just published another volume, intitled *Travels in China;* whither also he accompanied Lord Macartney. We shall pay due attention to it.

R.W.

ART.

ART. II. *Poems*, from the Portuguese of Luis de Camoens: with Remarks on his Life and Writings, Notes, &c. &c. By Lord Viscount Strangford. Crown 8vo. pp. 160. 7 s. Boards. Carpenter. 1804.

AMONG the delicate fruit with which we are sometimes refreshed in our literary walks, we cannot hesitate to class these amatory effusions of Camoens, or rather of his pretended translator. A young nobleman of the present day, who loves to beguile his more serious labours in cultivating the graces of the Attic muse, here affords a rare and flattering presage of future eminence. This pleasing consideration, and the classical ease and delicacy which characterize the present volume, induce us to dwell on it rather more minutely than its limited size may seem to require.

The biographical remarks are chiefly supplementary to those of Mickle, the elegant but free translator of the Lusiad. They contain some new anecdotes, conveyed in neat and elegant language, and are sprinkled with sentiments which accord with the finest feelings of the heart. Our readers will pardon the insertion of a few paragraphs:

'The latter years of CAMOENS present a mournful picture, not merely of individual calamity, but of national ingratitude. He whose best years had been devoted to the service of his country, he, who had taught her literary fame to rival the proudest efforts of Italy itself, and who seemed born to revive the remembrance of ancient gentility and Lusian heroism, was compelled in age to wander through the streets, a wretched dependent on casual contribution. One friend alone remained to smooth his downward path and guide his steps to the grave with gentleness and consolation. It was Antonio, his slave, a native of Java, who had accompanied CAMOENS to Europe, after having rescued him from the waves, when shipwrecked at the mouth of the Mecon. This faithful attendant was wont to seek alms throughout Lisbon, and at night shared the produce of the day with his poor and broken-hearted master *. Blessed, for ever blessed, be the memory of this amiable Indian! But his friendship was employed in vain: CAMOENS sank beneath the pressure of penury and disease, and died in an alms-house † early in the year 1579. He was buried in the church of Saint Anne of the Franciscans. Over his grave, Goncalo Coutinho placed the following inscription ‡, which, for comprehensive

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'* *Faria y Sousa.* § xxix.'

'† The place of his death is differently mentioned by *Manoel de Faria.* According to that commentator, he died in his own miserable hovel, close to the church in which he was interred.'

'‡ *Sousa.* Vid. §. Some years afterwards, Don Goncalves Camera caused a long and pompous epitaph to be engraved on the same tomb. But this posthumous panegyric only added deeper disgrace to the facts recorded in the former inscription.'

simplicity,

simplicity, the translator ventures to prefer to almost every production of a similar kind :

HERE LIES LUIS DE CAMOENS :
HE EXCELLED ALL THE POETS OF HIS TIME.
HE LIVED POOR AND MISERABLE ;
AND HE DIED SO.
MDLXXIX.

'It has been justly observed, * that the fate of CAMOENS, considered in a political view, bears an intimate connection with that of his country. The same degradation of national sentiment, which suffered such a man to become a beggar and an outcast, not long afterwards plunged Portugal into the lowest disgrace, and reduced her to the abject state of a conquered province. So true it is, that the decline of public spirit in matters of taste is a certain indication of political decay †.

'The character of CAMOENS may be inferred from his writings. An open and undisguised contempt of every thing base and sordid, whatevever were the rank or power of its possessor, formed one of its principal features. We have already seen how much the worldly interest of our poet was injured by this honourable audacity of soul. Those who condemn it must be ignorant that the exercise of this feeling produces a more enviable delight than any which fortune can ever bestow. The poor man is not always poor!

'But gallantry was the leading trait in the disposition of CAMOENS. His amours were various and successful. Woman was to him as a ministering angel, and for the little joy which he tasted in life, he was indebted to her. The magic of female charms forms his favourite theme, and while he paints the allurements of the sex with the glowing pencil of an enthusiast, he seems transported into that heaven which he describes. Nor did this passion ever desert him; even in his last days, he feelingly regretted the raptures of youth, and lingered with delight on the remembrances of love. A cavalier named Ruy de Camera ‡, having called upon our author to finish a poetical version of the seven penitential psalms, raising his head from his miserable pallet, and pointing to his faithful slave, he exclaimed, "Alas, when I was a poet, I was young, and happy and *blest with the love of ladies*, but now I am a forelorn deserted wretch :—See—there stands my poor Antonio, vainly supplicating *four pence* to purchase a little coals—I have them not to give him!" The cavalier, as Sousa quaintly relates, closed his heart and his purse, and quitted the room. Such were the grandees of Portugal!'

'* *Mickle.* Life of Camoens.'

'† Of this opinion was Camoens himself. In a letter to Don Francisco de Almeyda, written a few days before his death, he has these prophetic expressions : "*Veran todos que fuy tan aficionado a mi patria, que no solo bolví para morir en ella, mas para morir con ella!*"— "The world shall witness how dearly I have loved my country. I have returned, not merely to die in her bosom, but to die with her!" *Sousa.* Vid. § xxv.'

'‡ *Sousa.* Vid. § xxix.'

And

We are not pleased with the noble author, when he labours to persuade us that he has really acted the part of a translator, and, in most cases, closely copied his original. In some instances, he has certainly pursued or expanded a hint furnished by the epic poet of Portugal; yet we shall not greatly err, if we regard those minor compositions as *poems* rather than *translations*, and Camoens as Viscount Strangford in disguise.—Ought such tricks of *diplomacy* to be tolerated in the literary world? We think that they should not. A little jockeyship of publication, however, cannot affect the intrinsic merit of the pieces themselves. That merit chiefly consists in a happy union of tender sentiment and simple elegant expression. Though love be the prevailing theme, and love has been celebrated since poets existed, these madrigals, canzonets, and sonnets will still bear the test of critical perusal, and will still please by their native sweetness. It is not mean praise to say of a young amatory poet, that he is more terse than Anacreon, and more delicate than *Little*. The following extracts will, we apprehend, justify the very favourable opinion which we have formed of the present collection:

'CANZON.

'When day has smil'd a soft farewell,
And night-drops bathe each shutting bell,
And shadows sail along the green,
And birds are still, and winds serene,
I wander silently.

'And while my lone step prints the dew,
Dear are the dreams that bless my view,
To Memory's eye the maid appears,
For whom have sprung my sweetest tears,
So oft, so tenderly:

'I see her, as with graceful care
She binds her braids of sunny hair;
I feel her harp's melodious thrill
Strike to my heart—and thence be still
Re-echo'd faithfully:

'I meet her mild and quiet eye,
Drink the warm spirit of her sigh,
See young Love beating in her breast,
And wish to mine it's pulses prest,
God knows how fervently!

'Such are my hours of dear delight,
And morn but makes me long for night,
And think how swift the minutes flew,
When last amongst the dropping dew,
I wander'd silently.'

'MADRIGAL.

'MADRIGAL.

'Dear is the blush of early light
To him who ploughs the pathless deep,
When winds have rav'd throughout the night,
And roaring tempests banish'd sleep—
Dear is the dawn, which springs at last,
And shows him all his peril past.

'Dearer to me the break of day,
Which thus thy bended eye illumes;
And chasing fear and doubt away,
Scatters the night of mental glooms,
And bids my spirit hope at last,
A rich reward for peril past!'

'SONNET.

'Mondego! thou, whose waters cold and clear
Gird those green banks, where Fancy fain would stay,
Fondly to muse on that departed day
When Hope was kind, and Friendship seem'd sincere;
—Ere I had purchas'd knowledge with a tear.
—Mondego! though I bend my pilgrim way
To other shores, where other fountains stray,
And other rivers roll their proud career,
Still—nor shall time, nor grief, nor stars severe,
Nor widening distance, e'er prevail in aught
To make thee less to this sad bosom dear;
And Memory oft, by old Affection taught,
Shall lightly speed upon the plumes of thought,
To bathe amongst thy waters cold and clear!'

'STANZAS.

'I saw the virtuous man contend
With life's unnumber'd woes;
And he was poor—without a friend—
Press'd by a thousand foes.

'I saw the Passions' pliant slave
In gallant trim, and gay;
His course was Pleasure's placid wave,
His life, a summer's day.—

'And I was caught in Folly's snare,
And join'd her giddy train—
But found her soon the nurse of Care,
And Punishment, and Pain.

'There surely is some guiding pow'r
Which rightly suffers wrong—
Gives Vice to bloom it's little hour—
But Virtue, late and long!'

'CANZONET.

'Thou hast an eye of tender blue,
And thou hast locks of Daphne's hue,
And cheeks that shame the morning's break,

And lips that might for redness make
Roses seem pale beside them;
But whether soft or sweet as they,
Lady! alas, I cannot say,
For I have never tried them.

'Yet, thus created for delight,
Lady! thou art not lovely quite,
For dost thou not this maxim know,
That Prudery is Beauty's foe,
A stain that mars a jewel!
And ev'n that woman's angel face,
Loses a portion of its grace,
If woman's heart be cruel!

'Love is a sweet and blooming boy,
Yet glowing with the blush of joy,
And (still in youth's delicious prime)
Tho' ag'd as patriarchal Time,
The withering god despises:
Lady! would'st thou for ever be
As fair, and young, and fresh as he—
Do all that Love advises!'

Lord Strangford's versification is soft and musical; and his rhymes are, for the most part, correct: but the suspension of a pause at the end of the line is sometimes so unduly prolonged, that it mars the ease and freedom which we expect in short and airy measures. Thus the second, third, and fourth lines of the Madrigal, which begins with 'Pr'ythee, Cupid,' &c. run into one another without so much as a terminating comma. In the stanzas to Night, we have three lines of the same exceptionable structure;

'For this around thy solemn fane
'Young birds I strew, that glisten
'With tears of woe
'By jealous Tithon,' &c.

Another example occurs at the beginning of the 14th sonnet:

'My best belov'd!—although unpitying skies
'And wrathful fortune sternly thus conspire
'To bid thy servant's lingering steps retire
'Far from the tempered gleam,' &c.

The epithet *southernly* is somewhat grating; and 'it shall often be warm'd by remembering thee' is one of the few lines which we should point out as prosaic.

P. 61. 'When I am *done to death* by thee,
And cold thy lover lies;'—

The

The phrase *done to death* must surely be an oversight, not to say an error of the Press.—As it stands, it gives us a culinary idea, very different from the *cold* state in which the Lover is represented to be.

We shall compensate for these strictures by copying another pleasing amatory effusion:

'CANZONET.

'*The Lady who swore by her Eyes.*

'When the girl of my heart is on perjury bent,
The sweetest of oaths hides the falsest intent,
And Suspicion, abash'd, from her company flies,
When she smiles like an angel—and swears by her eyes.

'For in them such magic, she knows, is display'd,
That a tear can convince, and a look can persuade;
And she thinks that I dare not, or cannot, refuse
To believe on their credit whate'er she may chuse.

'But I've learn'd from the painful experience of youth,
That vehement oaths never constitute truth;
And I've studied those treach'rous eyes, and I find
They are mutable signs of a mutable mind!

'Then, dear one, I'd rather, thrice rather believe
Whate'er you assert, even though to deceive,
Than that you "by your eyes" should so wickedly swear,
And sin against heaven—for heaven is there!'

'Of the *notes*,' the noble writer remarks, 'little can be said. He who comments on amatory verses undertakes but a limited office. His utmost effort is the citation of parallel passages, unless he substitute admiration for criticism; a mistake into which, of all others, a translator is most likely to fall.' Let us add that his Lordship's translations and imitations of these parallel passages are executed with singular neatness and propriety.

Among the other beauties of this classical performance, the reader of taste will not overlook the pretty and merited compliment with which Lord S. concludes his preface:

'The present writer has yet to offer his grateful acknowledgments to those whose advice and experience have aided his labours. It is with pride and pleasure that he enrols among them the names of *Percy* and of *Hayley*. To the kindness of the latter he is indebted for the assistance of many valuable books, which could not elsewhere be procured; and to the almost fatherly friendship of the learned Bishop of Dromore, his obligations have long been unbounded. It is no small honour to so young a writer, that he should be countenanced by men, who, like the good spirits in *Trissino*, sit under the shade of their own laurels, and smile encouragement on those who are labouring up the mountain over which they preside.'

The work is handsomely printed, and embellished with a head of Camoens. **Muir.**

ART. III. *An Account of the Astronomical Discoveries of Kepler:* including an Historical Review of the Systems which had successively prevailed before his Time.—By Robert Small, D.D. F.R.S. Edinburgh. 8vo. pp. 370, and 11 Plates. 7s. 6d. Boards. Mawman.

THE real merit of those great men, who have given to Science and Philosophy a new existence and a new form, is known only to few. Their praises, however, loudly resound on every side; and while all, who make pretensions to acquirements in Science, speak of Galileo, Bacon, Kepler, and Newton, with enthusiasm, very few consult the original works of these celebrated authors. In books of easier access, and of more familiar aspect, we seek for sketches of their discoveries, for the summaries of doctrine, and for the results of investigation. The "bright reward" of those who "live laborious days,"—*the veneration of posterity*,—is not always the offspring of reason and feeling: we praise, because others have praised before us, and reverberate the echo of reiterated commendation.

Bacon and Newton are not yet removed into the shade, nor viewed through the medium of another's representation: we are not as yet contented with the substance and spirit of their philosophy, compressed within the limits of a journal or a magazine: since national partiality, acting on the same side with good taste and judgment, still cause their original productions to be read by their countrymen. Galileo and Kepler, however, the one preferred by his historian to Bacon, the other the illustrious precursor of Newton, are almost entirely neglected. The little which we know of them is derived from the second-hand report of others; and indolence, or want of opportunity, has hitherto induced us to subscribe to the statements of others respecting their labours and their merits.

To the generality of readers, indeed, it must be acknowleged, the original works of such authors are not most conveniently adapted. Numerous circumstances influence the style and the mode of communicating new notions and discoveries. From the prevailing ignorance of the times, it might be necessary tediously to explain and illustrate truths now commonly received; and from the current prejudices, it might be necessary to combat errors with caution or with vigour, which now would seem excessive and preposterous. The minds of the inventors, also, felt the influence of the opinions of their age, and complied with its fashion: from the frequent employment of barbarous terms, and of words without precise signification, they imperfectly and obscurely communicated their inventions; from the intentional use of terms, by which poor and beggarly notions

notions had often been imposed on the world as notions stately and magnificent, they could not refrain from throwing an air of mystery over their discoveries; and they sought an unworthy triumph by perplexing and bewildering, when they ought simply and plainly to have instructed.

Much then is to be found in the writings of these patriarchs in science, that may be retrenched and altered; and the author who has skill and patience to pierce through light and darkness, through truth and error, and to separate them, is intitled to the thanks of the community. In such a situation, the present writer stands:—to sufficient patience for the task, we congratulate ourselves that Dr. Small added the requisite ability; and possessing the requisite ability, we must strongly applaud his patience.

Of the plan of this work, we cannot give a better account than is contained in the author's own words:

'My principal intention, in the present publication, is to give a more full and particular account of Kepler's discoveries, than any to be found in the usual systems, or the general histories of Astronomy; and to extract the account from his own investigations. These are chiefly contained in his Commentary on the Motions of Mars; and I have often regretted that a work, containing such invaluable discoveries, should not be more generally and distinctly known. This work claims attention for another reason, that it exhibited, even prior to the publication of Bacon's *Novum Organum*, a more perfect example, than perhaps ever was given, of legitimate connection between theory and experiment; of experiments suggested by theory, and of theory submitted without prejudice to the test and decision of experiments. But, in order to form a just estimate of those discoveries, nay, perhaps, a distinct conception of the investigations by which they were produced, it seemed absolutely necessary to prefix an account of the more ancient astronomical theories, and of the principal phenomena which they were contrived and supposed to explain.'

In Chapter 1, on the Principal Motions and Inequalities of the Celestial Bodies, will be found a very precise and perspicuous statement of some of the ordinary phænomena of the heavenly bodies; together with the method of computing the mean motions of the planets, &c. Since the writings of Kepler and their merits cannot be properly appreciated without a knowlege of the antient systems, Dr. Small devotes his second chapter to explain those systems, and particularly that of Ptolemy. We do not force ourselves into panegyric, when we say that this explanation is conveyed in a very masterly manner. Dr. S. clearly represents the concentric and excentric theories, and shews the alteration, (or rather complication,) which such theories received, in order that the heavenly phænomena might be reduced under their laws. He does not

in a rough and general manner exhibit Ptolemy's system, but gives the method by which that great Astronomer found the excentricity of the equant, the equations of the centre, the semi-diameters of the epicycle, &c. He likewise points out the defects under which Ptolemy's system laboured; not defects originating in physical absurdity, or absence of simplicity and analogy, but on an inadequate explanation of phænomena; and this is the true ground for rejecting theories: since in the most perfect, something must always be left to conjecture, and much must rest on probability.—The author concludes the 2d chapter with these sensible observations:

'Notwithstanding the labour employed, and the ingenuity displayed in the formation of this system, its imperfections were so great and numerous, that it was impossible it should always continue to maintain its credit. Though the original introduction of excentric orbits by Hipparchus banished some of the ancient epicycles, and promised greater simplicity than had been attained in the ancient concentric theory, the more extensive application, which Ptolemy and his followers made of the excentric theory, rendered it at last almost as perplexed and intricate as the theory which it had displaced. Its suppositions were often dissimilar, and even inconsistent with one another; and instead of answering to the title of a system, it was an assemblage of parts connected by no general principle of union, and between which there subsisted no known mutual relations; for, though the ratio of an epicycle to its peculiar orbit might be determined, those of the orbits to one another were entirely arbitrary. In many respects it was destitute of the authority even of sense, to which it principally appealed; and, notwithstanding the pretensions of reducing the celestial phenomena to the rules of geometrical calculation, it was not uncommon to find differences of hours and days, and even of months, between the calculation and the fact; nay, it frequently happened, that the predictions, made according to its rules, entirely failed. But the objection, which seems to have struck at the credit of the Ptolemaic theory more than all its inaccuracy in representing the phenomena, was its contradiction to the supposed inviolable law of circular and uniform motion, which it was the principal object of all systems to establish and confirm. Not only did its oscillations and librations produce perpetual deviations, both from the plane and the circumference of the circle; but also the uniformity aimed at by the equant itself was purely imaginary; for it took place in an orbit where the celestial body was hardly ever found; and, by the introduction of it, a real inequality of velocity was acknowledged in the orbit, which the body actually described. The position also of the centre of the equant was regulated by no general law: for, in the theories of Venus and the superior planets, its distance from the centre of the earth was bisected by the centre of the orbit; in the theory of Mercury, on the contrary, the mean excentricity of the orbit was bisected by it; in the lunar theory, it continually varied its position; and, in the solar theory, it coincided with

with the centre of the orbit. Finally, by the complicated motions ascribed to some of the circles, especially in the theories of the moon and Mercury, those bodies were brought, in some parts of their orbits, so near to the earth, that their position was wholly inconsistent with all observations of diurnal parallax.'

With our present advantages of science, improved and confirmed by multiplied observations, the system of Ptolemy appears monstrous and incongruous: by the multiplication of epicycles, it might explain the inequalities in the motions of the heavenly bodies, but it could never adequately account for the alterations of their distances: besides, the planets' motions in latitude caused new perplexities to the system; and (which was a great argument, at least against its simplicity,) it was found necessary continually to increase the number of the epicycles, with the advancing accuracy of observations. Yet these real defects of the Ptolemaic system were not the cause of its overthrow; since the motives which happily induced Copernicus to revolt against antient authority were not founded in reason. He was displeased, not with the complication of the epicycles, (for he himself did not reject their use,) but with the violation of what he thought was a law of nature, the principle of uniform motion in perfect circles:—but now, relying on an astronomy established by numerous and accurate observations, we teach that the motions of the heavenly bodies are neither uniform nor performed in circles. If, however, the cause of Copernicus's revolt was unjustifiable, the revolt itself was most fortunate, and opened a road for the explanation of the true system of the world.

By a happy temerity, or by a wonderful sagacity, Copernicus at one blow demolished a multitude of epicycles, by making the earth to revolve round the sun, like other planets, and its orbit to become a great epicycle. All astronomers know that, by this simple hypothesis, he plainly and adequately accounted for what are called the second inequalities; and it became immediately obvious, with the help of a diagram, why a planet must sometimes appear retrograde, and sometimes stationary. By this hypothesis he was enabled, with the aid of geometry, to assign the ratio subsisting between the distances of the planets from the sun, and to account for the variations of the planets' latitudes. In other explanations, however, Copernicus failed:—in that of the lunar theory, and of the first inequalities of the planets. He exerted, like his predecessors, much ingenuity and much geometry, to no purpose.—The author of the present treatise thus neatly concludes his account of the Copernican system:

'The principal cause which engaged Copernicus in all this waste of labour and ingenuity, was the unhappy prejudices so often men-

tioned in favour of uniform and circular motion, joined to his excessive deference for Ptolemy. This deference was indeed the sole cause of that most vexatious part of his labour, which regarded the motions of Mercury: for his situation on the low and foggy banks of the Vistula, rendered it impossible for him to make observations himself on that excentric planet; and he had not presumed, like Kepler, to suspect that Ptolemy, instead of deducing his theory from observations, had sometimes corrected the observations to suit the theory. When he introduced therefore such a complication of circles, and perplexed compositions of their motions, to account for the singular phenomenon of Mercury's greatest digressions taking place at 60° on each side of his least distance from the earth, it was because he had no opportunity of discovering that the phenomenon was imaginary; and the observations, from which it was inferred, either inaccurately made, or unfaithfully transmitted.

'The system of Copernicus was not received, on its appearance, with any degree of that approbation which it deserved, and which it now universally obtains. Its cold reception, indeed, fully justified the hesitation and tardiness of its author, to communicate it to the world. Yet, his want of success in explaining the latitudes and first inequalities of the planets in longitude, and the intricacy of his theories on these subjects, were not the principal causes of rejecting his opinions. On the contrary, those were the parts of his labours which, on their first publication, were chiefly valued: and his theory of Mercury, especially, notwithstanding its being encumbered with more epicycles than his explanation of the second inequalities had banished, excited the admiration of many eminent astronomers. But his system was chiefly opposed, on account of all in it that was valuable and distinguishing: and the substitution of the diurnal and annual motions of the earth, for the apparent diurnal revolution of the heavens, and the annual motion of the sun, was such a violent contradiction, both of the philosophical principles of the age, and the immediate evidence of sense, that all its advantages were undervalued, and proved insufficient to procure to it general credit. The conception of Copernicus, which represented the distance of the fixed stars from the sun to be so immense, that in comparison with it, the whole diameter of the terrestrial orbit shrunk into an imperceptible point, was too great to be adopted suddenly by men accustomed to refer all magnitudes to the earth, and to consider the earth as the principal object in the universe. Instead of being reckoned an answer to the objection against the annual revolution of the earth, that her axis was not found directed to different stars, it was rather considered as the subterfuge of one who had invented, and therefore tried to vindicate, an absurdity: and, when in answer to another equally powerful objection, that no varieties of phase were seen in the planets, especially in Venus and Mercury, Copernicus could only express his hopes that such varieties would be discovered in future times, his reply, though it now raises admiration, could not in his own times make the least impression on those who opposed his system. The earth was universally supposed to be so immense and ponderous as to be incapable of any kind of motion: and the diurnal rotation, in particular, was thought

thought to be decisively confuted by the consideration of centrifugal force; which would throw off all bodies, animate and inanimate, from its surface. These objections, and many others of no force in themselves, but in that age deemed irresistible, by reason of the low state of human knowledge, prevented the Copernican system from being generally considered in any other light than as a mere hypothesis, and were the principal causes of the celebrity for some time maintained by the system of T. Brahé.'

In pursuance of his plan, Dr. Small next gives an account of Tycho Brahé, with his system and discoveries. The former has shared the fate of the Ptolemaic, and is rejected as false: but his discoveries of the lunar inequality, called the Variation, —of the inequalities of the motions of the nodes, and of the inclination of the lunar orbit,—and lastly his numerous observations which proved so useful to Kepler,—must for ever assign to Tycho Brahé a distinguished place among the founders of astronomical science. His system was favourably received by his contemporaries: for the Danish astronomer shocked not vulgar prejudices, nor was guilty of Galileo's heresy, by ascribing motion to the earth.

'Great, however, as the ingenuity and merits of T. Brahé appear to be, we can hardly fail to perceive the inferiority of his system to the Copernican, in perspicuity, simplicity, and symmetry of parts. The periodical motions which he ascribed to the planets were double, and performed round two different centres; for, considering the orbits of the planets as epicycles, a planet had first to move in the circumference of its epicycle round the sun, and then the sun, carrying along with him all the planetary epicycles, had to move round the centre of the ecliptic: and, if we also take into consideration the diurnal revolution, the system of T. Brahé will be found more complex than that of Ptolemy, who gave one common centre to all the revolutions, both periodical and diurnal. But, notwithstanding the perplexed nature of this system, and that it gave no account why the sun, moon, and planets, should obey the diurnal revolution of a sphere, in which they did not move: or why the planets should obey the annual revolution of the solar sphere, from which the distance of some was immense; or why the earth, though placed between the spheres of Mars and Venus, should alone resist the influence, whatever it might be, which carried these bodies and so many others on each side of it round the sun; such was the difficulty of conceiving and admitting the motion of the earth, that this intricate and incoherent system was preferred to the simple and beautiful system of Copernicus, by all the vulgar; and for a long time rivalled, and even surpassed it, in reputation, among the learned.'

The 5th chapter presents a brief relation of Kepler's studies, of his first publication, of his introduction to Tycho Brahé, and of his original intentions. Kepler soon found that all existing theories were defective; and his first projected innovation was

suggested to him, as he noted the antient method of forming the theories of the first inequalities of the planets, by observing their mean oppositions only. This method is evidently defective, except in one particular instance. He purposed, therefore, to alter it; and to shew that the planes of the planets' orbits intersected each other in lines passing, not through the centre of the ecliptic, but through the centre of the sun.

'This (says Dr. S.) was the great innovation which he originally intended, and was chiefly desirous to introduce into astronomy. In fact, excepting only the system of Copernicus, it was an improvement more important, and of greater consequence, to simplify the science, than any which had been introduced in all the preceding ages; and his successful and decisive establishment of its truth and propriety, may be justly ranked among his greatest discoveries; and equally deserves our attention with those which have been more generally celebrated.'

The author then states some additional reasons which impelled Kepler to his projected innovation, and which that astronomer communicated to Tycho Brahé. The latter not being convinced, and unwilling to abandon his own notions, Kepler proceeded to compel him by proofs, which are contained in the first part of his Commentary *De Stellâ Martis.*—The next business of Kepler was an examination of Tycho Brahé's system, which the sagacious German soon discovered to be erroneous. Tycho's error chiefly arose from his mistaking the apparent orbit of the planet for the true orbit; by which means, the reductions which he wrongly applied became very great.

Chapter 6th treats on Kepler's theory, founded on apparent oppositions. As a preliminary step to the establishment of this system, Kepler proposed to himself to determine the place of the nodes of a planet's orbit, and the inclination of the orbit; and in this previous labour he made what is to be reckoned one of his principal discoveries, namely, that the inclination of orbits is invariable and constant. This discovery at once demolished the oscillations which Ptolemy had given to the epicycle, and Copernicus to the orbit, of the planet; and it enabled Kepler to pursue his plan of investigating the elements of his first theory of Mars, which he distinguished by the name of the *vicarious theory.*

'When, (observes Dr. Small,) the detail of it is so fatiguing, he appeals to his readers if he, who had gone over all its steps no less than seventy times, was not justly entitled to their sympathy; and if it was at all surprizing that four years had been consumed in the formation of it. If we consider that logarithms were not then invented, the justice of his appeal will be readily admitted.'

Kepler

Kepler next applied to the verification of his theory; and, as far as it depended on longitudes in oppositions, it was found to be true: but observations of latitudes in opposition, and of longitudes made at points not in opposition, furnished complete refutations of this hypothesis. The excentricity deduced from these observations differed materially from the excentricity given by the longitudes in oppositions. One at least, then, of the principles of the theory was false: 'if the orbit of the planet were a perfect circle, it undeniably appeared, there could be no fixed point within it, about which the planet moved uniformly; or, if the centre of uniform motion were a fixed point in the line of apsides, the orbit of the planet could not be a perfect circle.'

Chapter 7th:—on Kepler's solar theory, that is, his theory of the second inequalities. No disappointment seems to have been sufficient to abate the ardor of Kepler's researches. Baffled in one track, he soon struck into a new investigation: he now resolved to examine all the circumstances of the earth's annual motion; and he speedily discovered the necessity of applying, in the language of Ptolemy, an equant to the earth: or, in other words, he found that the centre of the orbit and equant did not coincide, but that the excentricity was bisected by the centre of the orbit. He then proceeded to researches of greater moment: he endeavoured to derive equations from the relation subsisting between the planet at any point of its orbit, and the planet's distance from the sun; and here he made his first steps towards that famous law, that the planets in equal times describe equal areas round the sun. These approaches were not, indeed, effected with the greatest precision. Certainly, Kepler, taking a circle, proved that the times of describing equal arches at the apsides varied as the distances from the sun: he then assumed it to be true for every point of the orbit; and conceiving the circle to be formed by lines drawn from a point in the diameter of the circle, he endeavoured to find the time of describing an arc by this analogy: as the sum of all the distances of the earth from the sun is to the sum of two distances (for instance), so are the periodic times to the time of describing the arc included between the two distances (the two distances here comprehend a degree, or an element of the circle). He next changed this method, by taking areas instead of the sum of distances; and although both methods are imperfect, yet he had made such near approximations to the true planetary theory, that he was able to prosecute his researches with increasing success.

Chapter 8 contains an account of the resumption of the theory of Mars. In the former attempt, from an imperfect knowlege

knowlege of the earth's motion, many errors had been committed: but the earth's motion was now better understood; and Kepler, calculating three heliocentric longitudes, and three distances * of Mars from the sun, investigated the circle belonging to these conditions. Taking other distances and longitudes, the elements of the circular orbit were found to be different from those which had been determined in the first instance; and hence a suspicion arose, that the orbit of Mars was not circular.—Kepler, however, did not at once give up the antient principle of circular orbits: but he abandoned all research into the form of the orbit; and calculating the aphelion and perihelion distances from observations, he proceeded to deduce equations in the same manner as in the solar theory. Here his calculation failing him, before he gave up the circular form, he re-examined his method of calculating equations, in which he had taken areas for the sum of distances: but, after much care, ascertaining that the imperfection of his method could not be the cause of his errors, he was at length led to this truth—that the orbit of Mars was not a circle, but a curve interior to a circle.

Kepler was soon again involved in difficulties. Misled by one of his theories, he assumed an oval orbit, which, with great mortification, he was compelled to abandon: but, at a time when his researches and calculations of infinite labour seemed useless and leading to nothing, mere accident befriended him, and shewed him the true law of the distances from the sun. He then advanced in his theory; and after much new alarm and vexation, he found that the orbit of Mars was an ellipse, described (as he investigated it) by means of the librations in the diameter of the epicycle.

After this great discovery, Kepler shewed that the areas described round the sun were proportional to the times of description; he deduced the mean and true anomaly from the excentric; and finally he solved the problem which still bears his name, of finding the true anomaly from the mean. The solution, as indeed are all others which have been given since his time, is an approximate one: an exact one is not to be expected, *propter arcus et sinus* ετερογένειαν †.

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* These data are also sufficient to investigate the elements of an elliptical orbit.

† "*Mihi sufficit credere, solvi a priori non posse propter arcus et sinus* ετερογένειαν. *Erranti mihi, quicunque viam monstraverit, is erit mihi magnus Apollonius.*" KEPLER. *Comm. de Motibus Stellæ Martis. Par. IV. p.* 300.

Strong

Strong confirmation of the truth of his theory was found by Kepler in the observations of latitude; and, which was not the fruit of patient research or sagacious observations, but was fortunately obtained in his fanciful and wild excursions after secret and mysterious analogies, he discovered the law of the relation subsisting between the periods of planets and their distances from the sun;—a law which theory proves to be true, when the masses of the planets are neglected in respect of the sun's mass.

The following is Dr. Small's recapitulation of Kepler's labours and discoveries; drawn up, in our judgment, with singular precision and perspicuity:

'This, then, is the history of the progress of Kepler, in making those celebrated discoveries, which first gave to astronomy a just title to the name of Science. Even at the beginning of his astronomical studies, and when his views were limited to the single object of referring the motions of the planets to the centre of the sun, instead of the centre of the ecliptic, his discoveries were of very great importance: and it is to his ingenuity in prosecuting this original design, that astronomy is indebted for the introduction of many valuable principles, which were either before unknown, or known imperfectly, and improperly applied. Of this kind are his new and various methods for determining the places of the nodes, and the inclinations of the orbits; the doctrine of the invariableness of these inclinations; the principles of the only just and legitimate reductions from any orbit to the ecliptic; and the first accurate determinations of the places and motions, both of the nodes and apsides. In the progress of his studies, and when, on finding the insufficiency of the alteration he had introduced, he reversed the usual process of astronomers, and considered the knowledge of the elements of the terrestrial orbit as the preliminary step for determining the elements of the rest; his discoveries were equally original, and still more valuable. For here, besides a variety of new and ingenious methods for ascertaining the distances of the earth in all points of her orbit from the sun, we find the important consequence was to introduce the principle of the bisection into the solar theory, and to demonstrate that, contrary to the uniform opinion of the ancients, the solar inequalities were no more than those of the planets entirely optical, but partly real: and this principle being universally established, and it appearing to be a general law, that every planet described arches of its orbit, the times of which were as their distances from the sun, the design which he had happily conceived, even in the most early period of his studies, of deriving from this law the whole planetary equations, was not only demonstrated to be possible, but also found, by its success in the solar orbit, to be practicable and advantageous.

'But the most interesting and important of Kepler's discoveries, were made in the application of his improved solar theory to the investigation of the theories of the planets. For here, besides ascertaining that the planes of the planetary orbits pass through the sun's centre,

centre, we find not only the secret of the true form of the orbit disclosing itself to his penetration, but also the law investigated of the areas of those orbits being proportional to the times employed in describing them ; and both these discoveries not only perfectly confirmed by evidence, but successfully applied to the calculation of the equations. As the distances between the earth and the sun, given by the improved solar theory, even in a circular orbit, were, on account of a small degree of excentricity, nearly accurate ; the distances of Mars from the sun, to the determination of which they were employed, must also have been nearly accurate. But when the distances of Mars, thus determined, were employed in deducing the elements of his orbit, and that orbit was supposed to be circular, all the conclusions concerning them were, on account of the greater excentricity, found to be false and inconsistent : and when, after the accurate determination of the elements from other principles, the method of areas was employed to calculate the equations, the errors, both in excess and defect, sometimes arose to more than 8′. Since, therefore, neither of these circumstances could have taken place, had the planet really moved in a circle, and particularly since the method of areas never could have produced so great an error as of 1′, in any point of it, strong suspicions arose that the orbit was not circular ; and, notwithstanding the reluctance of Kepler to depart from an opinion so long established, and held as an inviolable maxim, the comparison of the real and observed distances of Mars from the sun, with the distances calculated for a supposed circular orbit, shewed the suspicions to be just ; and presented evidence, which could not be resisted, that the orbit in all points between the apsides retired within the circle.

' But though it thus appeared that the orbit was not circular, its real form continued undiscovered ; and Kepler, in consequence of a precipitate and groundless theory concerning the cause of the deviation from the circle, was led falsely to conclude that it was an oval, coinciding indeed with the circle at the apsides ; but whose deviation from it, at 90° of excentric anomaly, counted from either apsis, amounted to no less than 858 parts of its semi-diameter, supposed to contain 100000. The vexatious labour in which this precipitancy engaged him, to describe the oval, to obtain its quadrature, to divide it in any required ratio, and to derive from it just equations, is almost inconceivable, and what perhaps no other person would have had the fortitude and perseverance to undergo. But it was by this labour that the true form of the orbit was discovered ; for, on comparing the distances deduced from observation, in no less than forty different points of anomaly, with those caculated for the same points in the oval orbit, the latter were found to fall as much short of the former, as the former had fallen short of the distances calculated for a circular orbit ; and, if the method of areas applied to the circle, had produced equations, erring sometimes more than 8′, in excess as well as in defect, the same method applied to the oval produced equal and contrary errors ; that is, of defect where the circle shewed excess, and of excess where the circle shewed defect. It was therefore evident, that the real path of the planet lay precisely in the middle

middle between the circle and the oval; and as in his calculations he had considered the oval as a real ellipse, it followed that the only curve, which could bisect the space intercepted between it and the circle, must be another ellipse.

'When Kepler thus found that the distances, given by his oval theory, fell as much short of the observed distances as those given by the circular theory had exceeded them, a fortunate accident discovered to him, that the distances used in the circle were the secants of the optical equations in all the different points of excentric anomaly; and that, if instead of these, he should use the different radii to which they were the secants, such distances would be obtained as should perfectly agree with the distances deduced from observation. But by a mistake committed in their position, that is, in the position of the planet at the time when its distance was supposed to be just, he again failed in his endeavours to obtain just equations; and, whether he employed the circular areas, or the actual sums of the distances, the true anomalies which he considered as correspondent to them were generally false, and sometimes erred more than 5′ from the point which the planet really occupied. His distances therefore, though proved by observation to be just, seemed to be inconsistent with the elliptical form ascribed to the orbit: for, in fact, by the positions which he had given them, they represented it as a new kind of oval, going beyond the ellipse in the first and fourth quadrants of anomaly, and retiring within it in the second and third; and only differing from the former in this respect, that it deviated less widely from the circle. Accordingly, when rejecting his distances he returned to the ellipse, it was not from perfect conviction of its being the path in which the planet actually moved, but only because no other prospect seemed to remain of applying the principles he had previously established to the derivation of just equations. But by this step of his procedure, the mistake which he had commited in the position of his distances came to be discovered; and the lines which he had substituted for the secants of the optical equations, instead of being inconsistent with the ellipse in which he had supposed the planet Mars to move, were found to lead to the accurate description of it. His speculations, therefore, concerning the elliptical form of the orbit, received the fullest confirmation; the elliptical areas, and the sums of the correspondent diametral distances, were found to be perfectly equivalent; and the just equations derived from them rendered it unquestionable, that this planet both revolves round the sun in an ellipse, and describes round the focus occupied by the sun, areas of its ellipse proportional to the times. By like experiments it was also found, that the same laws regulated the revolutions of all the other planets; and the three discoveries, that the orbits of all the planets are ellipses, in whose common focus the sun is situated; that they describe round the sun areas of their ellipses proportional to the times; and that the squares of the times of their revolutions are proportional to the cubes of the greater axis of their orbits, or of their mean distances from the sun; are justly to be considered as the most important ever made in astronomy. They were, indeed, the foundations of the whole theory of Newton; and it will not perhaps be thought

thought an unjust conclusion from the consideration of them, that no person, in any age, ever soared higher than Kepler, above the common elevation of his contemporaries.'

That we think highly of this volume may in some degree be inferred from the length of the article: but inference is not sufficient; in plain terms, we are of opinion that Dr. Small has laid the public under much obligation, and has added to his own fame, by the present performance. He seems to have studied the subject with great attention,—to have slurred nothing over,—and he is accurate both in principle and in detail. The reader is made an associate of Kepler's labours, and a participator of his triumphs and disappointments. He views the difficulties with which that philosopher was fated to contend, the low state of science, the prejudices of the times, and antient systems which, if false, were yet the fruit of time, of labour, of ingenuity, and were sanctioned by authority. Placed near the German philosopher, 'those who contemplate this history view the cause and the necessity of his immense labours; they must admire his perseverance and activity, even in the excursions which led him astray from the true object of search; and they must sympathize with him in his dubious wanderings, in his mental perturbations, in the wreck of some of the dearest of his hopes, and in the endurance of that fatigue which it was necessary to sustain before the true system could be founded. *Tantæ molis erat!*

Kepler, indeed, possessed great patience and perseverance, but not the patience and perseverance of a mere plodding mathematician: he was sagacious and inventive; in his suggestions and hypotheses, he was fanciful and excentric, but bold and daring: he often attempted to mount from effects to their causes, and to place himself at the fountain-head of the universe: in fine, he was a philosopher by temper and nature, a geometrician by necessity and from convenience. Nothing was too arduous for him, and nothing ever dismayed him: repeatedly foiled and thrown down, he rose with fresh vigor, and enjoyed (according to his own confession) a hard-won victory: "*Sed tamen jucundior est victoria, quæ parta erat cum periculo; et nitidior ex nubibus sol exit: Attende, igitur, lector, ad pericula nostræ militiæ,*" &c. *Arg. Cap. Comm. de Motubus Stellæ Martis.* When we consider his discoveries in their history and importance, we find ourselves compelled to join in Dr. Small's concluding remark, as above quoted, 'that no person, in any age, ever soared higher than Kepler, above the common elevation of his contemporaries.'

R.W.

ART.

ART. IV. *The Works of the Right Honourable Lady Mary Wortley Montagu.* Including her Correspondence, Poems, and Essays. Published by Permission, from her genuine Papers. Crown 8vo. 5 Vols. 2l. Boards. R. Phillips. 1803.

THE title of the English Sevigné has generally been given to the fair author of these well-known Letters, and we now find that this was a rank in reputation which she seems to have anticipated. Writing, in 1724, to the Countess of Mar, Lady Mary says, 'The last pleasure that fell in my way was Madame Sevigné's Letters; very pretty they are, but I assert, without the least vanity, that mine will be full as entertaining forty years hence.' It is remarkable that, about forty years after this period, a surreptitious edition of some of her letters issued from the press; and the avidity, with which they were read, proved that she did not over-rate her epistolary talents. In addition to the ease and vivacity which delight the readers of Sevigné, our fair and noble countrywoman displays a mind improved by literature, an extensive observation of mankind, and a judgment matured by habits of reflection. If the world was captivated by the edition of her Letters published in 3 Vols. in 1763 (of which an account was given by us in M. Rev. Vol. xxviii. p. 384.) what pleasure may it not reasonably expect from the present work? It was not generally doubted that the Letters of Lady M—y W—y M——u, formerly printed, really proceeded from the pen of Lady Mary: but they came "in such a questionable shape," that, notwithstanding they bore all the internal remarks of authenticity, they were not perused with complete satisfaction. The manner in which the copy was obtained was not told; and we are obliged to the present editor, Mr. Dallaway, for dissipating the cloud which hung on that transaction. This gentleman informs us that

'In the later periods of Lady Mary's life, she employed her leisure in collecting the copies of the letters she had written during Mr. Wortley's embassy, and had transcribed them herself, in two small volumes in quarto. They were without doubt sometimes shewn to her literary friends. Upon her return to England for the last time, in 1761, she gave these books to Mr. Sowden, a clergyman at Rotterdam, and wrote the subjoined memorandum on the cover of one of them. "These two volumes are given to the Reverend Benjamin Sowden, minister at Rotterdam, to be disposed of as he thinks proper. This is the will and design of M. WORTLEY MONTAGU, December 11, 1761."

'After her death, the late Earl of Bute comissioned a gentleman to procure them, and to offer Mr. Sowden a considerable remuneration, which he accepted. Much to the surprise of that nobleman and Lady Bute, the manuscripts were scarcely safe in England when three volumes of Lady Mary Wortley Montagu's Letters were published

by Beckett; and it has since appeared, that Mr. Cleland was the Editor. The same gentleman, who had negotiated before, was again dispatched to Holland, and could gain no farther intelligence from Mr Sowden, than that a short time before he parted with the MSS. two English gentlemen called on him to see the Letters, and obtained their request. They had previously contrived, that Mr. Sowden should be called away during their perusal, and he found on his return that they had disappeared with the books. Their residence was unknown to him, but on the next day they brought back the precious deposit, with many apologies. It may be fairly presumed, that the intervening night was consumed in copying these Letters by several amanuenses. Another copy of them, but not in her own handwriting, Lady Mary had given to Mr. Molesworth, which is now in the possession of the Marquis of Bute. Both in the original MS. and the last-mentioned transcript, the preface, printed by Beckett, is inserted, purported to have been written in 1728, by a lady of quality, and signed M. A.'

Though it may hence be inferred that Lady Mary had meditated the publication of a part at least of her correspondence, and that she had given the MS. to Mr. Sowden with this view, yet it is evident that the Letters which appeared in 1763 were not printed with the consent of any of her family. The volumes now before us may be considered as the only genuine edition of her Ladyship's works; into which, the respectable editor assures us, 'no letter, essay, or poem has been admitted, the original manuscript of which is not at this time extant, in the possession of her grandson, *the Marquis of Bute*;' by whose liberal permission, this work has been prepared for the press.

Prefixed to the Letters, are Memoirs of the Author, by the editor; in which the life of this celebrated lady is briefly sketched, and from which we shall abstract the most prominent circumstances.

Lady Mary Pierrepont, afterward Lady M. W. Montagu, the eldest daughter of Evelyn Duke of Kingston and Lady Mary Fielding, (daughter of William Earl of Denbigh,) was born at Thoresby in Nottinghamshire *about* the year (was there no register of her birth to be found?) 1690. A mother's care she did not long experience: but her father endeavoured to supply the loss; and, encouraged by early indications of uncommon genius, he bestowed on her an education much superior to that which females then received, imbuing her tender mind with classical studies. "Born," as she tells us herself, in one of her letters, "with a passion for learning," and happy in a facility of acquiring language, she improved the uninterrupted leisure and retirement which she enjoyed at Thoresby, and at Acton, (a village not far from London,) by making a rapid proficiency in Greek, Latin, and French. As a proof of this fact, when

she had scarcely attained her 20th year she presented to Bishop Burnet, who had superintended her education, a version of the Enchiridion of Epictetus, accompanied by a sensible letter, inserted in this collection; the merit of which, observes the editor, 'is not invalidated, even should it be thought that her translation, (of which, in some passages, there is certainly ground for suspicion,) is of the Latin version rather than of the Greek original.'

In Aug. 12, 1712, Lady Mary was married to Edward Wortley Montagu, Esq. the son of her most confidential friend Mrs. Ann Wortley, after a peculiarly aukward and unpromising correspondence of about two years; a specimen of which we purpose to adduce from this part of the collection of letters. For three years after her marriage, she lived in retirement at Warncliffe Lodge near Sheffield; while her husband, a man possessed of solid rather than of brilliant parts, attended his duty in parliament. The appointment of Mr. Wortley, in 1714, to be a commissioner of the Treasury, brought Lady Mary from her retirement to town, and occasioned her first appearance at St. James's; which, as Mr. Dallaway remarks, 'was hailed with that universal admiration which beauty, enlivened by wit, incontestibly claims.' Her personal charms and intellectual accomplishments were attractions not to be resisted. Not confined to the circles of the nobility, she was in habits of familiar acquaintance with Addison, Pope, and other men of genius. In 1716, she accompanied her husband in an Embassy to Constantinople, from which she did not return till 1718; and it was during this period that she wrote those most amusing Letters in 3 Vols. which were published in 1763, containing an account of her travels in Europe, Asia, and Africa. The accuracy of her descriptions is corroborated by the present editor; who, eighty years afterward, followed nearly the same route over the Continent to the seat of the Turkish Empire, and resided nearly the same space of time which Lady Mary passed in the palace of Pera. The fruit of this tour was the introduction of Inoculation into this country. Finding the practice of *ingrafting* the small-pox, as it was then termed, to be common in the Turkish dominions, and attended with the most salutary consequences, she applied it to her own son, at that time about three years old; and by her recommendation, it was adopted here with a success which we need not detail.

On the return of Mr. Wortley to England, Lady Mary, at the earnest solicitation of Mr. Pope, fixed her summer residence at Twickenham: but, though the letters of Mr. Pope to her ladyship during her husband's embassy to the Levant abound with expressions of the most ardent admiration, and

those of the lady manifest some esteem for the poet, their friendship was not of long duration. The cause of the quarrel, or of the mutual aversion which succeeded, is not explained. Whether Pope was piqued at discovering that, in spite of his love-making letters and fine compliments, the lady regarded his person with disgust, and turned him into ridicule,—or whether, as is here intimated, he envied her talents, and became jealous of her partialities to the Herveys,—we shall not attempt to decide. His hatred, however, was conspicuous, and he endeavoured to blacken her fame by the coarsest satire, and most unwarrantable asperity. Lady Mary is said to have withdrawn from his society, and to have abstained from consulting him as a critic, on finding that he disengenuously encouraged the idea that whatever was good in her ladyship's poetry resulted from his corrections. When the quarrel was avowed, sarcasm on the one side and satire on the other took place: but it must be observed that, whatever were the poet's irritations, he has been most wanton in his resentment, and equally mean in his prevarications on being charged with the fact. It is now generally understood that Pope meant Lady Mary by *Sappho*, though he disclaims such an intention in his Letter to Lord Hervey; and the comment of the present editor, on the poet's reason for discontinuing her ladyship's acquaintance, taken in connection with Warburton's explanatory note, may be thought to confirm the supposition:

"I assure you (writes Pope to Lord Hervey) my reason for doing so (dropping the acquaintance,) was merely that you had *both too much wit for me*, and that I could not do with mine, many things, which you could with yours."

'The explanatory note to the words, *too much wit for me*, in Warburton's edition, consists of the following couplet, from his epistle to Arbuthnot, among the variations.

"Once and but once his heedless youth was bit,
And liked that dangerous thing, a female wit."

'Pope's avowed reason for discontinuing Lady Mary's acquaintance was, therefore, that she had *outwitted* him, and the truth by the corrected lines,

"Yet soft by nature, more a dupe than wit,
Sappho can tell you how this man was bit."

is most fairly proved. For if he were *outwitted* by a female wit, and by *Sappho*, and yet outwitted but *once*, *Sappho* and Lady Mary must of course be the same identical person. Still he did not hesitate to assert, in the same letter, "I can truly affirm, that, ever since I lost the happiness of your conversation, I have not published or written one syllable of, or to either of you, never hitched your names into a verse, or trifled with your good names in company."

'But more attention is not due to the investigation of this controversy, which may now be dispassionately viewed. Time has annihilated

annihilated their animosities, and the liberality of the present age will allow, how much any character may suffer, or may command, under the authority of a great name. The magic of Pope's numbers makes us unwilling to know, that they were not always the vehicle of truth.'

For many years, Lady Mary, possessed of rank and fortune, and enveloped in the gaieties of the fashionable world, led the life of a fine lady; which, however brilliant, was too monotonous to afford incidents meriting biographical notice. In 1739 her health began to be impaired, which circumstance is urged as the ground of a resolution formed by her, of passing the residue of her days on the Continent. Having, therefore, obtained her husband's leave, she left England in the month of July, and hastened to Venice, determining to establish herself in the North of Italy. This second tour to the Continent, and the remainder of her history, are so concisely related by Mr. Dallaway, that we need not attempt to abridge his account:

'Having been gratified by a short tour to Rome and Naples, she returned to Brescia, one of the palaces of which city she inhabited, and appears not only to have been reconciled to, but pleased with, the Italian customs. She spent some months at Avignon and Chamberry. Her summer residence she fixed at Louvere, on the shores of the lake of Isco, in the Venetian territory, whither she had been first invited on account of the mineral waters, which she found greatly beneficial to her health. There she took possession of a deserted palace, she planned her garden, applied herself to the business of a country life, and was happy in the superintendance of her vineyards and silk worms. Books, and those chiefly English, sent her by Lady Bute, supplied the deficiency of society. Her letters from this retreat breathe a truly philosophic spirit, and evince that her care of her daughter and her family was ever nearest to her heart. No one appears to have enjoyed her repose more sincerely, from the occupations of the gay world. Her visits to Genoa and Padua were not unfrequent; but, about the year 1758, she quitted her solitude, and settled entirely at Venice *, where she remained till the death of Mr. Wortley, in 1761. She then yielded to the solicitations of her daughter, the late Countess of Bute, and, after an absence of two-and-twenty years, she began her journey to England, where she arrived in October. But her health had suffered much, and a gradual decline terminated in death, on the 21st of August 1762, and in the seventy-third year of her age. In the cathedral at Litchfield a cœnotaph is erected to her memory, with the following inscription:—

'The monument consists of a mural marble, representing a female figure of Beauty, weeping over the ashes of her preserver, supposed to be inclosed in the urn, inscribed with her cypher M. W. M.

'* The English travellers at Venice, who she presumed might have been induced to visit her from curiosity, she received in a mask and domino, as her dress of ceremony.'

'Sacred to the memory of
The Right Honorable
Lady MARY WORTLEY MONTAGU,
who happily introduced from Turkey,
into this country,
the salutary art
of inoculating the small-pox.
Convinced of its efficacy,
she first tried it with success
on her own children,
and then recommended the practice of it
to her fellow-citizens.
Thus by her example and advice
we have softened the virulence,
and escaped the danger of this malignant disease.
To perpetuate the memory of such benevolence,
and to express her gratitude,
for the benefit she herself received
from this alleviating art;
this monument is erected by
HENRIETTA INGE,
relict of THEODORE WILLIAM INGE, Esq.
and daughter of Sir JOHN WROTTESLEY, Bart.
in the year of our Lord M,DCC,LXXXIX.'

These memoirs receive additional interest from the insertion of various letters from Pope, Fielding, Young, Addison, &c. together with *fac similes* of their hand-writing.

The letters of this celebrated lady, which occupy almost the whole of these volumes, consist of four series; the first containing her Correspondence before the year 1717; the second, the Letters written by her during Mr. Wortley's Embassy to the Porte, which were surreptitiously given to the public in 1763; the third, Letters sent from England to the Countess of Mar at Paris; and the fourth, Letters to Mr. Wortley and her family, during her second residence abroad, from 1739 to 1761. To these letters are subjoined her translation of Epictetus, and her Poems and Essays. A great portion, therefore, of the matter of these volumes is new; and that part which is a re-publication is given with more correctness, and real names are substituted for the initials which appeared in the edition above-mentioned.

In the Correspondence which is contained in the first volume, we have the letters of Lady Mary Pierrepont to Mrs. Wortley, and those which were addressed to her lover; who appears to have been a remarkably cold admirer, notwithstanding that the Lady is very frank and ingenuous, as will be seen from this single specimen of the courtship:

'To E. W. Montagu, Esq.

'I intended to make no answer to your letter; it was something very ungrateful, and I resolved to give over all thoughts of you. I could easily have performed that resolve some time ago, but then you took pains to please me: now you have brought me to esteem you, you make use of that esteem to give me uneasiness; and I have the displeasure of seeing I esteem a man that dislikes me. Farewell then: since you will have it so, I renounce all the ideas I have so long flattered myself with, and will entertain my fancy no longer with the imaginary pleasure of pleasing you. How much wiser are all those women I have despised than myself? In placing their happiness in trifles, they have placed it in what is attainable. I fondly thought fine clothes and gilt coaches, balls, operas, and public adoration, rather the fatigues of life; and that true happiness was justly defined by Mr. Dryden (pardon the romantic air of repeating verses), when he says,

"Whom heav'n would bless it does from pomp remove,
And makes their wealth in privacy and love."

These notions had corrupted my judgment as much as Mrs. Biddy Tipkin's. According to this scheme, I proposed to pass my life with you. I yet do you the justice to believe if any man could have been contented with this manner of living, it would have been you. Your indifference to me does not hinder me from thinking you capable of tenderness and the happinesses of friendship: but I find it is not in me you'll ever have them: you think me all that is detestable; you accuse me of want of sincerity and generosity. To convince you of your mistake, I'll shew you the last extremes of both.

'While I foolishly fancied you loved me, (which I confess I had never any great reason for, more than that I wished it,) there is no condition of life I could not have been happy in with you, so very much I liked you—I might say loved, since it is the last thing I'll ever say to you. This is telling you sincerely my greatest weakness; and now I will oblige you with a new proof of generosity—I'll never see you more.—I shall avoid all public places; and this is the last letter I shall send. If you write, be not displeased if I send it back unopened. I shall force my inclinations to oblige yours; and remember that you have told me I could not oblige you more than by refusing you. Had I intended ever to see you again, I durst not have sent this letter. Adieu.'

Though this letter does not seem to be the forerunner of a marriage, and though others equally unpromising follow, the catastrophe in due time took place; after which we behold Lady Mary's good sense and worldly wisdom in the character of a wife:

'To E. W. Montagu, Esq. 1714.

'Though I am very impatient to see you, I would not have you, by hastening to come down, lose any part of your interest. I am surprized you say nothing of where you stand. I had a letter from Mrs. Hewet last post, who said she heard you stood at Newark, and

would be chose without opposition; but I fear her intelligence is not at all to be depended on. I am glad you think of serving your friends; I hope it will put you in mind of serving yourself. I need not enlarge upon the advantages of money; every thing we see and every thing we hear, puts us in remembrance of it. If it were possible to restore liberty to your country, or limit the encroachments of the prerogative, by reducing yourself to a garret, I should be pleased to share so glorious a poverty with you; but, as the world is and will be, 'tis a sort of duty to be rich, that it may be in one's power to do good; riches being another word for power, towards the obtaining of which the first necessary qualification is impudence, and (as Demosthenes said of pronunciation in oratory) the second is impudence, and the third, still, impudence. No modest man ever did or ever will make his fortune. Your friend Lord Halifax, R. Walpole, and all other remarkable instances of quick advancement, have been remarkably impudent. The Ministry is like a play at Court; there's a little door to get in, and a great crowd without, shoveing and thrusting who shall be foremost; people who knock others with their elbows, disregard a little kick of the shins, and still thrust heartily forwards, are sure of a good place. Your modest man stands behind in the crowd, is shoved about by every body, his clothes torn, almost squeezed to death, and sees a thousand get in before him, that don't make so good a figure as himself.

'I don't say it is impossible for an impudent man not to rise in the world; but a moderate merit, with a large share of impudence, is more probable to be advanced than the greatest qualifications without it.

'If this letter is impertinent, it is founded upon an opinion of your merit, which, if it is a mistake, I would not be undeceived; it is my interest to believe (as I do) that you deserve every thing, and are capable of every thing; but nobody else will believe it if they see you get nothing.

M. W. M.'

Incorporated with the second series, are the Letters which were addressed to Lady Mary during her first visit to the Continent, and which are copied from the originals in the possession of the Marquis of Bute. Some of these are to be found printed in Pope's works, in the section intitled "Letters to Several Ladies:" but, if compared with those which are before us, considerable variations will be discovered. Mr. Pope informs his fair correspondent that he sent more copies than one, which may account for this difference: or it may arise from subsequent alterations made by Mr. Pope when he prepared his Letters for publication.

To Letter XX. in the section above-mentioned in Pope's Works, Vol. VII., this addition appears in the Letter taken from the MS. in the possession of Lady Mary's noble relative. After the words, "enjoy elsewhere," it proceeds;

'May

'May that person for whom you have left all the world be so just as to prefer you to all the world. I believe his good understanding has engaged him to do so hitherto, and I think his gratitude must for the future. May you continue to think him worthy of whatever you have done; may you ever look upon him with the eyes of a first lover, nay, if possible, with all the unreasonable happy fondness of an unexperienced one, surrounded with all the enchantments and ideas of romance and poetry. In a word, may you receive from him as many pleasures and gratifications as even I think you can give. I wish this from my heart, and while I examine what passes there in regard to you, I cannot but glory in my own heart that it is capable of so much generosity. I am, with all unalterable esteem and sincerity,

'Madam,

'your most faithful obedient humble servant,

'A Pope.'

Letter XXI., of Pope's Correspondence with Several Ladies, is still more different from that which is printed among Lady Mary's collection. Here we meet with this singular addition:

'If I don't take care, I shall write myself all out to you; and if this correspondence continues on both sides at the free rate I would have it, we shall have very little curiosity to encourage our meeting at the day of judgment. I foresee that the further you go from me, the more freely I shall write; and if (as I earnestly wish) you would do the same, I can't guess where it will end: let us be like modest people, who, when they are close together, keep all decorums; but if they step a little aside, or get to the other end of a room, can untie garters or take off shifts without scruple.'

Pope speaks of 'the disguise of a discontented heart:' but in this language there is little of either disguise or decorum. The poet evidently must have been enamoured of this fine woman; and when he found that his passion was the source of disgust and ridicule, poignant hatred succeeded to his love.

We shall pass over the third series, and direct the reader's attention to some parts of Lady Mary's correspondence during her residence in Italy. She was now no longer young; her pursuits were those of a *femme philosophe*; and, if we excuse some degree of misanthropy, (occasioned perhaps by the mortifications which declining life is doomed to suffer) her observations on the world will be found to be as sage as they are lively, and to display a clear insight into the human character. Her descriptions of places are given with so much ease and nature, that we seem to travel with her. The subjoined account of herself, of her physician, and of her retreat at Louvere, cannot fail to be perused with considerable interest:

'TO THE COUNTESS OF BUTE.

Louvere, June 23, N. S. 1752.

'Soon after I wrote my last letter to my dear child, I was seized with so violent a fever, accompanied with so many bad symptoms, my life was despaired of by the physician of Gottolengo, and I prepared myself for death with as much resignation as that circumstance admits: some of my neighbours, without my knowledge, sent express for the doctor of this place, whom I have mentioned to you formely as having uncommon secrets. I was surprised to see him at my bedside. He declared me in great danger, but did not doubt my recovery, if I was wholly under his care; and his first prescription was transporting me hither: the other physician asserted positively I should die on the road. It has always been my opinion that it is a matter of the utmost indifference where we expire, and I consented to be removed. My bed was placed on a brancard; my servants followed in chaises; and in this equipage I set out. I bore the first day's journey of fifteen miles without any visible alteration. The doctor said as I was not worse I was certainly better; and the next day proceeded twenty miles to Isco, which is at the head of this lake. I lay each night at noblemen's houses, which were empty. My cook, with my physician, always preceded two or three hours, and I found my chamber and all necessaries ready prepared with the exactest attention. I was put into a bark in my litter bed, and in three hours arrived here. My spirits were not at all wasted (I think rather raised) by the fatigue of my journey. I drank the water next morning, and with a few doses of my physician's prescription, in three days found myself in perfect health, which appeared almost a miracle to all that saw me. You may imagine I am willing to submit to the orders of one that I must acknowledge the instrument of saving my life, though they are not entirely conformable to my will and pleasure. He has sentenced me to a long continuance here, which, he says, is absolutely necessary to the confirmation of my health, and would persuade me that my illness has been wholly owing to my omission of drinking the waters these two years past. I dare not contradict him, and must own he deserves (from the various surprising cures I have seen,) the name given him in this country of the miraculous man. Both his character and practice are so singular, I cannot forbear giving you some account of them. He will not permit his patients to have either surgeon or apothecary: he performs all the operations of the first with great dexterity, and whatever compounds he gives, he makes in his own house; those are very few: the juice of herbs, and these waters, being commonly his sole prescriptions. He has very little learning, and professes drawing all his knowledge from experience, which he possesses, perhaps, in a greater degree than any other mortal, being the seventh doctor of his family, in a direct line. His forefathers have all of them left journals and registers solely for the use of their posterity, none of them having published any thing; and he has recourse to these manuscripts on every difficult case, the veracity of which, at least, is unquestionable. His vivacity is prodigious, and he is indefatigable in his industry; but what most distinguishes him is a disinterestedness

I never

I never saw in any other: he is as regular in his attendance on the poorest peasant, from whom he never can receive one farthing, as on the richest of the nobility; and whenever he is wanted, will climb three or four miles on the mountains, in the hottest sun, or heaviest rain, where a horse cannot go, to arrive at a cottage, where, if their condition requires it, he does not only give them advice and medicines gratis, but bread, wine, and whatever is needful. There never passes a week without one or more of these expeditions. His last visit is generally to me. I often see him as dirty and tired as a foot-post, having eat nothing all day but a roll or two that he carries in his pocket, yet blest with such a perpetual flow of spirits, he is always gay to a degree above chearfulness. There is a peculiarity in this character that I hope will incline you to forgive my drawing it.

'I have already described to you this extraordinary spot of land, which is almost unknown to the rest of the world, and indeed does not seem to be destined by nature to be inhabited by human creatures, and I believe would never have been so, without the cruel civil war between the Guelps and Gibellines. Before that time here were only the huts of a few fishermen, who came at certain seasons on account of the fine fish with which this lake abounds, particularly trouts, as large and red as salmon. The lake itself is different from any other I ever saw or read of, being the colour of the sea, rather deeper tinged with green, which convinces me that the surrounding mountains are full of minerals, and it may be rich in mines yet undiscovered, as well as quarries of marble, from whence the churches and houses are ornamented, and even the streets paved; which, if polished and laid with art, would look like the finest mosaic work, being a variety of beautiful colours. I ought to retract the honourable title of street, none of them being broader than an alley, and impassable for any wheel carriage except a wheel barrow. This town, which is the largest of twenty-five that are built on the banks of the lake of Isco, is near two miles long, and the figure of a semi-circle, and situated at the northern extremity. If it was a regular range of building, it would appear magnificent; but being founded accidentally by those who sought a refuge from the violences of those times, it is a mixture of shops and palaces, gardens and houses which ascend a mile high, in a confusion which is not disagreeable. After this salutary water was found, and the purity of the air experienced, many people of quality chose it for their summer residence, and embellished it with several fine edifices. It was populous and flourishing, till that fatal plague, which over-ran all Europe in the year 1626. It made a terrible ravage in this place: the poor were almost destroyed, and the rich deserted it. Since that time it has never recovered its former splendor; few of the nobility returned; it is now only frequented during the water-drinking season. Several of the ancient palaces are degraded into lodging-houses, and others stand empty in a ruinous condition: one of these I have bought. I see you lift up your eyes in wonder at my indiscretion. I beg you to hear my reasons before you condemn me. In my infirm state of health the unavoidable noise of a public lodging is very disagreeable; and here is no private one: secondly, and chiefly, the whole purchase is but one hundred pounds, with a very pretty garden in terraces down

to

to the water, and a court behind the house. It is founded on a rock, and the walls so thick, they will probably remain as long as the earth. It is true the apartments are in most tattered circumstances, without doors or windows. The beauty of the great saloon gained my affection: it is forty-two feet in length by twenty five, proportionably high, opening into a balcony of the same length, with a marble balustre; the ceiling and flooring are in good repair, but I have been forced to the expence of covering the wall with new stucco; and the carpenter is at this minute taking measure of the windows in order to make frames for sashes. The great stairs are in such a declining way, it would be a very hazardous exploit to mount them: I never intend to attempt it. The state bed-chamber shall also remain for the sole use of the spiders that have taken possession of it, along with the grand cabinet, and some other pieces of magnificence, quite useless to me, and which would cost a great deal to make habitable. I have fitted up six rooms, with lodgings for five servants, which are all I ever will have in this place; and I am persuaded that I could make a profit if I would part with my purchase, having been very much favoured in the sale, which was by auction, the owner having died without children, and I believe he had never seen this mansion in his life, it having stood empty from the death of his grandfather. The governor bid for me, and nobody would bid against him. Thus I am become a citizen of Louvere, to the great joy of the inhabitants, not (as they would pretend) from their respect for my person, but I perceive they fancy I shall attract all the travelling English; and, to say truth, the singularity of the place is well worth their curiosity; but, as I have no correspondents, I may be buried here thirty years, and nobody know any thing of the matter.'

In another letter to the Countess of Bute, she thus describes her *landed-property* and her manner of life:

'Louvere, June 10, N. S. 1753.

'I have been these six weeks, and still am, at my dairy house, which joins to my garden. I believe I have already told you it is a long mile from the castle, which is situate in the midst of a very large village, once a considerable town, part of the walls still remaining, and has not vacant ground enough about it to make a garden, which is my greatest amusement, it being now troublesome to walk, or even go in the chaise till the evening. I have fitted up in this farm-house a room for myself, that is to say, strewed the floor with rushes, covered the chimney with moss and branches, and adorned the room with basons of earthen ware (which is made here to great perfection) filled with flowers, and put in some straw chairs, and a couch-bed, which is my whole furniture. This spot of ground is so beautiful, I am afraid you will scarce credit the description, which, however, I can assure you, shall be very literal, without any embellishment from imagination. It is on a bank, forming a kind of peninsula, raised from the river Oglio fifty feet, to which you may descend by easy stairs cut in the turf, and either take the air on the river, which is as large as the Thames at Richmond, or by walking an avenue two hundred yards on the side of it, you find a wood of a hundred acres, which was all ready cut into walks and ridings when I took it. I

have

have only added fifteen bowers in different views, with seats of turf. They were easily made, here being a large quantity of underwood, and a great number of wild vines, which twist to the top of the highest trees, and from which they make a very good sort of wine they call brusco. I am now writing to you in one of these arbours, which is so thick shaded, the sun is not troublesome, even at noon. Another is on the side of the river, where I have made a camp-kitchen, that I may take the fish, dress, and eat it immediately, and at the same time see the barks, which ascend or descend every day to or from Mantua, Guastalla, or Pont de Vie, all considerable towns. This little wood is carpetted, in their succeeding seasons, with violets and strawberries, inhabited by a nation of nightingales, and filled with game of all kinds, excepting deer and wild boar, the first being unknown here, and not being large enough for the other.

'My garden was a plain vineyard when it came into my hands not two years ago, and it is, with a small expence, turned into a garden that (apart from the advantage of the climate) I like better than that of Kensington. The Italian vineyards are not planted like those in France, but in clumps, fastened to trees planted in equal ranks (commonly fruit trees), and continued in festoons from one to another, which I have turned into covered galleries of shade, that I can walk in the heat without being incommoded by it. I have made a dining room of verdure capable of holding a table of twenty covers; the whole ground is three hundred and seventeen feet in length, and two hundred in breadth. You see it is far from large; but so prettily disposed (though I say it), that I never saw a more agreeable rustic garden, abounding with all sorts of fruit, and producing a variety of wines. I would send you a pipe, if I did not fear the customs would make you pay too dear for it. I believe my description gives you but an imperfect idea of my garden. Perhaps I shall succeed better in describing my manner of life, which is as regular as that of any monastery. I generally rise at six, and as soon as I have breakfasted, put myself at the head of my needle women, and work with them till nine. I then inspect my dairy, and take a turn among my poultry, which is a very large inquiry. I have, at present, two hundred chickens, besides turkies, geese, ducks, and peacocks. All things have hitherto prospered under my care; my bees and silk-worms are doubled, and I am told that, without accidents, my capital will be so in two years time. At eleven o'clock I retire to my books, I dare not indulge myself in that pleasure above an hour. At twelve I constantly dine, and sleep after dinner till about three. I then send for some of my old priests, and either play at piquet or whist, till 'tis cool enough to go out. One evening I walk in my wood, where I often sup, take the air on horseback the next, and go on the water the third. The fishery of this part of the river belongs to me; and my fisherman's little boat (to which I have a green lutestring awning) serves me for a barge. He and his son are my rowers without any expence, he being very well paid by the profit of the fish, which I give him on condition of having every day one dish for my table. Here is plenty of every sort of fresh water fish (excepting salmon); but we have a large trout so like it, that I who have almost forgot the taste, do not distinguish it.'

The

The publications of the day, sent to her from England, are the subjects of remark in many of her letters. Of Johnson's *Rambler*, she thus speaks:

'The Rambler is certainly a strong misnomer; he always plods in the beaten road of his predecessors, following the Spectator (with the same pace a pack horse would do a hunter) in the style that is proper to lengthen a paper. These writers may, perhaps, be of service to the public, which is saying a great deal in their favour. There are numbers of both sexes who never read any thing but such productions, and cannot spare time, from doing nothing, to go through a sixpenny pamphlet. Such gentle readers may be improved by a moral hint, which, though repeated over and over, from generation to generation, they never heard in their lives. I should be glad to know the name of this laborious author.'

She read Novels, but she perceived their evil-tendency, which she thus reprobates:

'All this sort of books have the same fault, which I cannot easily pardon, being very mischievous. They place a merit in extravagant passions, and encourage young people to hope for impossible events, to draw them out of the misery they choose to plunge themselves into, expecting legacies from unknown relations, and generous benefactors to distressed virtue, as much out of nature as fairy treasures.'

The works of Fielding and Smollett were great favorites with her Ladyship, in this line of reading.

Female beauties should study Lady M. W. Montagu, in order to learn how to grow old with a grace. When she was 66 years of age, she thus writes to her daughter:

'There is a quiet after the abandoning of pursuits, something like the rest that follows a laborious day. I tell you this for your comfort. It was formerly a terrifying view to me, that I should one day be an old woman. I now find that nature has provided pleasures for every state. Those are only unhappy who will not be contented with what she gives, but strive to break through her laws, by affecting a perpetuity of youth, which appears to me as little desirable at present as the babies do to you, that were the delight of your infancy. I am at the end of my paper, which shortens the sermon.'

In her poetic pieces, Lady Mary was very careless of her rhimes, and consequently interrupts the satisfaction which we should otherwise receive from the effusions of her Muse; yet her poems have been and will continue to be admired. The public are acquainted with so many of them inserted in Dodsley's Collection, that we shall here add only two short compositions:

'An Answer to a Lady,
Who advised Lady M. W. Montagu to retire.

'You little know the heart that you advise,
I view this various scene with equal eyes;

In

In crowded court I find myself alone,
And pay my worship to a nobler throne.

'Long since the value of this world I knew;
Piti'd the folly, and despis'd the shew;
Well as I can, my tedious part I bear,
And wait dismissal without pain or fear.

'Seldom I mark mankind's detested ways,
Not hearing censure nor affecting praise;
And unconcern'd my future fate I trust,
To that sole Being merciful and just.'

'Written at Louvere, October 1736.

'If age and sickness, poverty and pain,
Should each assault me with alternate plagues,
I know mankind is destined to complain,
And I submit to torment and fatigues.

'The pious farmer, who ne'er misses pray'rs,
With patience suffers unexpected rain;
He blesses Heav'n for what its bounty spares,
And sees, resign'd, a crop of blighted grain.
But spite of sermons, farmers would blaspheme,
If a star fell to set their thatch on flame.'

The Essays consist of a Letter from the other world, to a Lady, by her former husband—Essay in a Paper called "the Nonsense of Common Sense," published Jan. 24, 1738;—a fragment of a fairy tale, in French, entitled *Carabosse*;—and Remarks on Rochefoucault's Maxim that "there are convenient but no happy marriages;" in which Lady Mary undertakes to defend Marriage against this severe reflection. This state, no doubt, frequently occasions disappointment; yet the remark of Dr. Johnson ought to be recollected by complaining wives and husbands, that "marriage is no otherwise unhappy than human life is unhappy."

As an editor, Mr. Dallaway has not officiously obtruded himself; though he has corrected the little inaccuracies of the former edition, and has subjoined short notes, by which the value of the work is augmented.

With the letter-press are given fac-similes of the correspondence of Pope, Addison, Young, Fielding, &c. as well as of Lady Mary, and two portraits of her.

Thus Lady Mary Wortley Montagu appears fully before the public as an author; and that critic must be frigid and unjust who, after such ample evidences of her brilliant mind, remains insensible to her merit, and reluctant to award her the fullest commendation.

ART. V. *Bonaparte, and the French People under his Consulate.* Translated from the German. 8vo. pp. 379. 7s. Boards. Tipper and Richards. 1804.

THE accounts hitherto laid before the public, respecting the extraordinary person who is the subject of this work, have been for the most part scanty, jejune, and of dubious credit; while, according to the bias of the writer, they have either dealt out the most bitter invectives, or have teemed with the most fulsome praises. The author before us, whether he be German or English, (we should suspect him to be the latter, if he did not discover a tincture of a philosophy which is more generally followed on the Continent than in our island,) claims a considerable superiority over all those who have preceded him in the same course; since he appears to have had favourable opportunities of observing his hero, and to have diligently availed himself of them. In the estimate which he forms of him, as well in a private as a public character, he displays a great compass of information, considerable judgment and discrimination, and very respectable descriptive talents. His dispassionate manner and studied impartiality also deserve great praise. A friend to rational liberty and human amelioration, he does not conceal his aversion from the plans and views of the First Consul, for such was his designation when this book was penned; and when he arraigns and exposes them, he does this by analyzing them, and setting forth their real tendency. He abstains from harsh epithets and virulent language, and leaves facts to speak for themselves. He readily admits the claims of Bonaparte to the highest military renown, to unrivalled activity, and to unparalleled dexterity in pursuing his schemes; and no attempt is made to conceal the obligations which he has conferred on the nation over which he rules. If he be exhibited as a dark, designing, crafty, merciless tyrant, who pursues solely the aggrandizement of his power, the picture is composed by displaying the particulars of his conduct, by developing his plans, and by placing his measures in open view. The outlines of his policy are sketched in a masterly manner, his public acts are ably discussed, and the aims which he studies to conceal are made to appear from facts not generally known, and from circumstances which had been unobserved by others.—The work presents equal attractions to those who read for pastime, and to those who seek instruction in the important science which weighs and regulates the interest of states and empires.

We shall exhibit some of the most remarkable features of the hero's infant days. Having informed us that Bonaparte was

born on the 15th of August 1769, at Ajaccio, in Corsica; that his father was a lawyer; and that General Marbœuf, who finished the conquest of the island, and who remained there as its governor, became his patron, and placed him, when ten years old, at the military college of Brienne, whence his superior attainments procured him an admission into the military school at Paris; the writer relates that, at this tender age,

'The deliverance of his native land from the French yoke was his favourite theme; and his expressions, in that respect, often betrayed in him a belief of its being his destiny happily to accomplish the plans, in which Paoli, who was then the idol of his heart, had proved unsuccessful. His school-fellows could not provoke his anger more, than by calling him a vassal of France. He had sworn eternal hatred to the Genoese, by whom Corsica was sold to that power. One day, when a young Corsican, newly arrived, was presented to him as a Genoese, he instantly seized him by the hair, and would have killed him, if some stronger boys had not parted them. For several weeks after, his rage always rekindled, when by chance he met this young student.

'He likewise signalized himself from his school-fellows, by a religious cast of mind, to the great satisfaction of his spiritual teachers.

'The mode of instruction in this college, being chiefly calculated for improvement in military art, coincided best with his inclination. Bonaparte did not profit much by the general instructions at the beginning, but soon devoted himself exclusively to the study of mathematics. He cared little about the knowledge of classic or modern languages, and still less for an acquaintance with the liberal arts and sciences; even the mechanical proficiencies of youth, as writing, riding, &c. were little regarded by him: hence he still writes a bad, illegible hand, and is but an indifferent horseman. His greatest delight was in reading Plutarch, and the life of the Marshal Prince of Saxony, which he chose as a recreation after the regular hours of close study in mathematics.

'The first friend he selected among his school fellows was Faucelet de Bourienne, like him a student in mathematics, and a youth who by his mild temper and pleasing bashfulness, had gained the good will of all the other boys. This Bourienne became, and always continued, first private secretary to Bonaparte, till the present year.

'His moroseness, and rough behaviour, to most of his school-fellows, exposed him to continual quarrels and battles, in which he generally suffered, being the weakest; yet he would never lodge a complaint with his rigid schoolmasters against them. He was generally their speaker and advocate in their little insurrections, and was usually singled out and punished as the leader, when the other boys would cringe for fear of being flogged; yet the most severe chastisement could not draw a single complaint from his lips.'

We are here informed that it was his brother Lucien, who found means, by way of England, to transmit to him in Egypt an account of the disasters with which France had been visited;

sited; and it is suggested that the English were not unapprized of his intentions to depart, though they were remiss in obstructing the execution of them, under the notion that the fall of the colony would speedily follow, when no longer cherished and protected by its founder.

The author thus describes the situation of Bonaparte on his attainment of the Consulship:

'He had now reached the plenitude of power; thirty millions of his fellow-creatures obeyed him: he was uncontrolled and secure; all parties pressed forward to join him; tired with their long continued strifes and numberless disorders, all looked up to him, in the hopes of security and happiness; all confided in the republican hero, who had even attempted to disseminate knowledge and freedom through the deserts of Africa. It was a happy moment: no hero, no legislator, in ancient or modern history, had ever been so successful. All was prepared; the materials of a glorious constitution for mankind were at hand—ready at the disposal of a truly great man, who, forgetful of his own interest, only studied the good of mankind: but Bonaparte was not this great man—his was not this noble aim. Whether he was actuated by that thirst of power, by which men of strong minds and uncontrollable activity are usually impelled; or by his conviction of the French being incapable of freedom; Bonaparte was only courageous; having no other view than to establish himself sole ruler.

'A new constitution, as it was called, by which all public functions were to be subordinate to him, was introduced on the 15th of December; by it all authority was vested in the hands of one single man. And this same constitution was but a tool, which he might lay aside whenever he chose: a legislative body, without the power of imposing laws: a tribunate, with full powers to make complaints, which the government had a right to disregard: a senate, incapable of enforcing its decrees—these were the bulwarks against the despotism of a man, in whose hands all executive power was lodged, who could propose laws and even annihilate at once the constitution altogether.'—

'Bonaparte made it his particular study from the beginning, to gain the good opinion of all men of genius; certain, that by securing their voice, he would have the suffrage of all. Being himself one of the most extraordinary men, the darling of good fortune, at the head of a people, ever prone to excess in adulation, and proud of their rulers, it was no wonder that fulsome praises and exultations resounded from all quarters. Foreigners, taking the newspapers and journals as the general interpreters of public opinion, were often led to think the enthusiasm for Bonaparte was universal; but a short residence at Paris, and the visiting public places of resort, or mixed societies, would soon convince them of their error. Bonaparte is by no means popular.—He is cold and reserved—he knows not how to inspire affection; a formal, carefully regulated deference and respect are shewn him; and he stands the more firm on that very account. He is not one of those idols raised by the voice of the people, commonly trampled upon with as little and as unexpected ceremony, as when first raised to unlimited power: he owes his rise to himself alone, and appears, for that very reason,

reason, to the multitude, as a superior being. The excessive authority of which he is possessed, banishes all familiarity even from those who are next to him in power. He has few enemies, an immense number of partisans, and hardly a single friend There is no cause at present by which the enthusiasm of the people can possibly be raised. None of the parties can be said to rule; none of them are suppressed: they are mixed one with another in such a manner, that it is difficult to decide which of them enjoys the greatest influence; he therefore does not consider himself dependent on their will. The principal leaders of the jacobin party have received a bribe from government, and have deserted their flock: their generals have changed sides – General Jourdan, in Piedemont, Fouche, the Minister of Police at Paris, and Dubois, are living proofs of this assertion. The whole party is torn asunder, and will scarcely ever be able to re-establish itself. Many of the royalists have degraded themselves by accepting offices under the present government, though in their heart they despise the Corsican.'

After the conspiracy of the *Infernale,*

'Bonaparte adopted several measures, which betrayed anxious fear for his personal security. His consular guard, which had been established from the beginning of his consulate, and all military guards, under whose protection he used to appear in public, were increased. His causing himself to be surrounded in such a manner, that the most undaunted, who might hazard their own lives to rid the world of this usurper, should find it impossible to approach him, degenerated into a perfect manœuvre, and became a new branch of military art. He has never since appeared abroad without these additional precautions of security. This dreadful catastrophe furnished him with a pretext for changing his mode of living, which had formerly been more liberal. Though disagreeable to him, he chiefly confined himself within the circle of his family, attended by his guards. Malmaison, a small country seat, belonging to his wife, but wholly isolated, and, on that account, the more easily defended, had often been the place of his residence; he also occasionally resided at the palace of the Thuilleries, which he had entered with great solemnity, soon after his being made consul; every corner being filled with his consular guards. For some time past he had lived almost exclusively at Malmaison, where he introduced a strict court etiquette, which rendered him absolutely invisible to all persons whom he did not know to be entirely devoted to him. Very few of those learned men and artists, formerly admitted in great numbers into his presence and family, were now permitted to approach him; the only persons to whom this favour was continued were groveling creatures, on whose slavish submission he could depend; and they were soon thrown back into the proper distance between master and servants.'

It is the design of this work to impress the reader's mind with the idea that Bonaparte is engaged in a systematic plan, the object of which is to extinguish in the French every relique of a republican spirit, and to give them habits and feelings directly the reverse of those which were attempted to be in-

duced by the first leaders of the revolution. These views of the Consul are said to be apparent in the character of the festivals with which he has indulged the people, since his attainment of the supreme power. Alluding to the first 14th of July, which happened under the Consulship, the writer says;

'This day, which had been hailed for twelve years as a day of liberty, and of the destruction of the Bastile, peace was celebrated; not in the extensive *champ de Mars*, where all republican feasts had been given since the grand anniversary of the confederation, but in the Elysian fields, where the people had been often entertained in the times of royal France.

'The whole management of this festival of peace bore a striking resemblance to the feasts given by the old court to the Parisians. In the room of the lofty temple of liberty in the field of Mars, where religious, judiciary, and military solemnities made an awful impression on the mind, there was to be seen a pretty, glittering, little kind of illuminated rotunda, built of wood, in which a number of fiddlers were scraping away, exactly as in the days of the old court, on the anniversary of St. Louis. Instead of prize fighting, grand races, and combats in the Roman style, in which every republican of note or property formerly used to take a share, there were to be seen, as in the good old times, a number of litte scaffolds for tumblers, rope-dancers, harlequins, pantaloons, scaramouchers, &c. Franconi, with his troop, had also places assigned, for feats of horsemanship and pantomimes. Garnerin rose with his balloon; and a *mât de l'ocagne* was erected, greased all over, intended to be climbed on, and hung with hams and sausages for the greedy rabble. Places for dancing were likewise appointed; in short, there was every thing to amuse an idle people, fond of merriment; and yet the people did not dance much. They were neither noisy nor much disposed for mirth: it was, indeed, a very composed and decent rejoicing.'

We cannot follow the author into a history of the intrigues and devices by which the re-establishment of the Catholic religion was prepared and accomplished, and of the parts taken by the Abbé Geoffroy, La Harpe, Beurrier, and Chateaubriand, in this change. Bonaparte does not here receive the praises for this measure with which he has been complimented from some other quarters, not accustomed to view his proceedings with approbation: for this writer regards it only as a part of the system above-mentioned, by which the conqueror seeks to debase the public mind, to shut out improvement, and to adapt the nation for the despotic government which he now exercises over it.

The account here given of the overtures made to the *Noblesse* of the old court to join the suite of the First Consul, of their refusal, of their secluded mode of living, and of their persecutions, forms a very interesting part of the volume.

'He

'He who rode triumphant over Mount St. Gothard, and through the sandy deserts of Syria: he who gives law to the greatest part of Europe; and disposes at his will of the finest countries: this mighty chief, at the head of so populous an empire, feels desires that he cannot satisfy. Casting his longing eye around, he fixes it by chance upon the saloon of Madam de Montessan. It happened at that moment to be crowded with persons of the first rank—"Those nobles shall be my attendants," he cries; and immediately dispatches his devoted dæmons with invitations, offers, and promises. But promises, offers, and invitations are ineffectual; the messenger returns disappointed and chagrined; he tells him that all his efforts have been fruitless; that their demands were far beyond what he would accede to.

'The angry fearful man is thus compelled to stand alone on the pinnacle of his newly-acquired dignity; watching night and day these rebels to his will. Their words, their actions, their looks, are equally objects of his suspicion; not even a gesture is suffered to escape him. Alarmed by continual fears, when they assemble in great numbers, he immediately disperses them. If they flee back to the coast, they are driven to the mountains; if they take refuge among the rocks, they are hunted to the sea.'

At the present court, we are told,

'There is nothing of that politeness, ease, vivacity, and grace, which signalized the societies at the royal court. Every body stares with a slavish gaze at the First Consul, who treats them indiscriminately in a dry, cold, and harsh manner. He sometimes attempts to be polite or witty, but his politness is a proud condescension, and his wit is satire. There is always something rough or low in his way of expressing himself. He frequently makes use of terms, only to be found in the mouth of the upstart soldier, and proscribed by all good company. He is capable of using the most abusive language with the greatest indifference. The tone of his voice is deep and hoarse, and what he says is often accompanied with such a disagreeable laugh, that nobody can feel easy with him, even when he attempts to say the most agreeable things.

'The highest officers of state must sometimes hear themselves addressed by epithets, which, certainly never escaped the lips of a sovereign. If he think he has caught one of his ministers or privy counsellors in something contradictory, he frequently says, "*vous etes un homme de mauvaise foi;*" or—"*vous me trompez.*"—(You are a man not to be trusted—you cheat me.')

Yet the etiquette of no court is more strict than that of the Thuilleries:

'From the Second Consul down to the lowest private of the guards at the gate, every one has his fixed place assigned him, which he dares not leave for a single moment, and where he remains immovable, staring at his neighbour, who is also fastened to the ground, without speaking a single word. Bonaparte alone goes the rounds in the circle formed only by the ambassadors and foreigners of distinction. The minister of foreign affairs, now M. Talleyrand, can only enter this circle, when a new ambassador is to be presented.'

A full-sized portrait of Talleyrand follows. Whether it be overcharged, or not, we shall not presume to determine: but, if pique has had any share in it, (as the style, unlike that of the author on other occasions, might lead us to suspect,) still it exhibits many characteristic features, and is executed with much ability. It is of too great a magnitude for us to copy.

There can be no doubt that the re-establishment of the Catholic worship greatly increased the number of the partisans of Bonaparte: but we are told that the measure was far from being universally acceptable; that vast numbers of Catholics, dreading the tyranny of their old clergy, have turned Protestants; and that this disposition increases, and considerably alarms the government, which has it in contemplation to apply to the Pope for a brevet, by which no one shall be permitted to change his religion without first obtaining its consent! The government has a great aversion to the Protestants, and its partisans represent them as on a level with illuminati, Jacobins, terrorists, &c. &c.

The despotic turn of Bonaparte, and the arbitrary nature of his government, were doubted by none: but of the pains which he is said to have taken, and the schemes which he has devised to render slavery permanent, few perhaps are apprized. It is a material object of these pages, to make us believe in a systematic design, invariably pursued on his part, to banish knowlege and liberal ideas from his dominions, and to convert his subjects into a rude, ignorant, abject, superstitious, military horde. The curious information here given of the changes which he has made, in the plans of education projected in the course of the revolution, place this matter in a strong point of view, if credence may be allotted to the relations. It is stated that the central schools, designed for the provinces, are superseded by Lyceums; and that these are to be conducted on the plan of the old French schools, in which nothing was taught except Latin and Mathematics. In the regulations for these schools, published by the First Consul, the principal stress is laid on the instruction of the children in the military exercise; a military cast is given to every thing that relates to them; and the schools for the sons of French citizens will be in future nothing else but martial establishments. Where the seminaries have been instituted, the school-rooms are intolerably filthy, and the boys are dreadfully flogged and beaten. It is easy to see how well this plan is adapted to make them hate learning. Every school is to be divided into six forms, each of which is to be occupied during a year. All that is to be read in a year is to be compressed into one volume, and the master is on no account to use any other book. Each school is to have a library of 1500 volumes,

lumes, which are to consist of the historical and mathematical works of the Jesuits. It was the dread of the prevalence of a liberal spirit, which made the Consul set aside the Institute, revive the four antient Academies, and abolish the class for moral philosophy, ethics, politics, and legislation. Thus all the splendid projects of the several leaders of the Revolution, for the improvement of the human mind, terminate in a wretched system which is to train up men for slavery at home, and to qualify them to be the instruments of carrying calamity and destruction among other nations.

Jo.

ART. VI. *History of the Insurrection of the County of Wexford, A.D.* 1798; including an Account of Transactions preceding that Event, with an Appendix. Embellished with an elegant Map of the County of Wexford. By Edward Hay, Esq., Member of the Royal Irish Academy. 8vo. pp. 504. 10s. 6d. Boards. Stockdale, Dublin: Cuthell, London. 1803.

THE sad tale of the late Irish rebellion has already been more than once told; and the author of this volume has been anticipated by a violent party-spirited baronet*, and by a very respectable protestant clergyman †, the one priding himself on his virulence and bigotry, the other not only doing honour to his own character, but reflecting lustre on his sacred profession, by the candor and fairness of his narrative. In the present instance, the pen is assumed by a liberal and accomplished catholic; who, though of decided attachments in politics and religion, displays a large share of impartiality, and whom ill usage, scarcely credible, cannot induce to falsify history. If the result of his researches does not relieve the philanthropist; if his account, instead of diminishing, rather increases the sum total of those horrors, which not only disgrace Ireland, but the empire of which it forms a part, and the very age that witnessed the perpetration of them; it more fully consults distributive justice, and it more accurately assigns to the several authors their respective shares in those acts. Mr. Hay more amply sets forth the causes which led to the rebellion, and less cloaks the enormities on the part of the late government-faction which provoked it, as well as those that were practised subsequently to it, than had been done by his predecessors. Far be it from us to attempt to vindicate the deluded insurgents, who were rendered frantic by a treatment unknown

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* Sir R. Musgrave. See Rev. Vol. 37. N. S. 274.
† Mr. Gordon. See Rev. Vol. 37. N. S. 374.

under modern civilized governments: but we would observe that their horrid excesses scarcely call forth greater detestation, than the cool deliberate malice which meditated and incessantly pursued their destruction: for it is here insinuated that Machiavelian policy anticipated the late dreadful storm, and, deeming it a process necessary to pave the way for certain measures which it had determined to carry *per fas et nefas*, had calculated on its result. Mr. Hay's narrative is on the whole able, luminous, and faithful: but it does not boast of peculiar literary merit, nor lay claim to a high finish of authorship. It by no means displays that felicity and perspicuity of style, that exquisite arrangement, those convenient breaks, those apt episodes judiciously introduced, which give dignity and interest even to low and ordinary subjects; and much more to one like the present, than which the ample and fertile page of history discloses nothing more instructive, more worthy of being studied by the practical politician.

The different parts of the work not admitting of much general criticism, we shall select, as specimens of the author's manner, a few of those passages which throw light on matters that have been less fully considered by his precursors. It may not be amiss, however, first to lay before our readers the account which he gives of himself, and which the scandalous and unmerited ill-treatment experienced by him not only justified, but absolutely required:

'My family have been established in Ireland since the reign of Henry the Second, as my ancestor came over with Strongbow, and was allotted a knight's share of lands in the southern part of the county of Wexford, which his descendants possessed until the revolution in Ireland about the middle of the seventeenth century, when there was but one estate in the whole county left unalienated by Cromwell. My ancestor had not the good fortune to be the person undisturbed; but he acquired a property in another part of the county, where his descendants have ever since resided. Born of catholic parents, and being reared in the principles of that religion, occasioned my banishment at an early age, for some years from my native country, as my parents wished to procure me a collegiate education in a foreign land, to which the rank and respectability of my family entitled me, but which the laws of my country denied me at home. After having pursued a course of study for several years in France and Germany, I returned to my native soil, fully sensible of my civil degradation as a catholic, and I therefore sought all the legal and constitutional means in my power in the pursuit of catholic emancipation.'

The author is far from thinking, with a witty senator, that the recall of a very respectable nobleman occasioned the Irish rebellion,

rebellion, in the same sense that the presence of Columbus in a western island caused the moon to appear under an eclipse to its inhabitants. He is of opinion that

'The removal of Lord Fitz William must ever be considered as one of the greatest misfortunes, that, in the revolution of ages, has befallen this devoted nation. It originated a train of calamitous circumstances, which the disclosing information of every day renders more and more lamentable to the friends of Ireland. The great majority of the people was insulted, public faith was violated; the cup of redress was dashed from the lips of expectation, and it cannot be wondered at that the anger of disappointment should have ensued. Had the healing balm been applied at the critical moment, the fever of commotion had long since passed its crisis. Had the benevolent measures, intended by that nobleman as the basis of his administration been effected, the rankling wounds of division and distraction were for ever closed, nor would the poison of prejudice and party-spirit still threaten convulsion and confusion; but harmony, confidence and peace would reign throughout the land.'

Numerous facts and considerations appear to us to justify the author in the position, that the rebellion in Wexford did not proceed from a pre-concerted plan, but was the effect of a sudden impulse; and this will not be considered as surprizing, when we duly reflect on the circumstances detailed in the passages which we are about to insert. Speaking of the disturbances in Ulster, in which the partisans of government were the actors, Mr. Hay informs us that

'Numbers went about in the night, searching houses, and taking away all the arms they could find, without violating any other property. This becoming generally known, the houses were usually opened upon the first summons. This easy mode of admittance was afterwards taken advantage of by common robbers; who at first only assumed the character of disarmers, to come at their prey with less trouble and more certainty. After a continued series of similar circumstances of violence and outrage, arising from a nation's greatest curse, the disunion of its people, but which our limits will not permit us to detail at present, General Lake issued his proclamation for disarming the inhabitants of the North of Ireland, on the 13th of March 1797; and on the 21st of the same month, Mr. Grattan, after a speech delivered with his usual force of talent and brilliant ability, moved for an inquiry into the causes which produced this proclamation; but his motion was unfortunately rejected The persecutions in the county of Armagh were so flagrant, and the conduct of many of the magistrates so contrary to law, that applications were made to the court of king's bench, for attachments against several of them, but a bill of indemnity prevented a judicial investigation of their conduct; and thus they were screened from merited punishment. This total disregard of their grievances, and inattention to their complaints, added to the barbarous outrages afterwards committed by the military in the northern counties, very much exas-

perated the feelings of the suffering party. They resorted for temporary relief to private sorrow and secret lamentation. In this sad state, bordering on despair, every injured person sympathized with his neighbour in affliction, and their united resentments, like a raging flame, suppressed, but not extinguished, were the more likely to burst forth with sudden fury, and unexpected violence. It may not be impertinent to remark, that in all cases of popular commotion, an inquiry into the alledged grievances ought to go hand in hand with the measures of rigour and coercion. These two principles are far from being incompatible, and any government acting upon them must be certain of conciliating obedience and affection, respect and attachment.'

Having paid a glowing tribute to Generals Abercromby and Hutchinson, which in the eyes of the benevolent and the wise exalts those heroic benefactors of their country much higher than the well-earned laurels gained by their bravery and conduct; the author says:

'Immediately on the departure of General Abercromby, the military were sent out at free quarters, in the county of Kildare, and parts of the counties of Carlow and Wicklow. What hardships, what calamity, what misery must not the wretched people suffer, on whom were let loose such a body as the soldiery then in Ireland are described to be in the general orders before alluded to of the 26th of April, 1798?—They became masters of every house in the country, the real owners were obliged to procure them every necessary they thought proper to demand; and, as their will was then the only law, and a very imperious and tyrannical law it was, the people dare not, except at the risque of their lives, complain of any outrage or brutality of which their savage disposition prompted them to be guilty. The inevitable consequence was, that such horrid acts were perpetrated such shocking scenes were exhibited, as must rouse the indignation, and provoke the abhorence of all not dead to humane feeling, or not barbarised by unnatural hatred of their fellow-creatures!'

The county of Wexford, not many months preceding the rebellion, was regarded as one of the most peaceable in Ireland: it had fewer United Irishmen than most others; and it did not labour under the nearly equal curse of having many Orangemen. This new class of friends to regular government, who supported lawful authority and social order by taking away the lives, destroying the property, and by torturing and ill-treating the persons of their fellow subjects, are here represented as the immediate and sole causes of the rebellion; and the extension of them is ascribed to the North Cork militia, commanded by Lord Kingsborough, who came there in April 1798.

'In this regiment, there were a great number of Orangemen, who were zealous in making proselytes, and displaying their devices; having medals and orange ribbons triumphantly pendant from their bosoms.

bosoms. It is believed, that previous to this period, there were but few actual Orangemen in the county; but soon after, those whose principles inclined that way, finding themselves supported by the military, joined the association, and publicly avowed themselves by assuming the devices of the fraternity.

'It is said, that the North Cork regiment were also the inventors —but they certainly were the introducers, of pitch-cap torture into the county of Wexford. Any person having their hair cut short, (and therefore called a croppy, by which appellation the soldier desig ated an United Irishman,) on being pointed out by some loyal neighbour, was immediately seized and brought into a guard house, where caps, either of coarse linen or strong brown paper, besmeared inside with pitch, were always kept ready for service. The unfortunate victim had one of these well heated, compressed on his head, and when judged of a proper degree of coolness, so that it could not be easily pulled off, the sufferer was turned out amidst the horrid acclamations of the merciless torturers; and to the view of vast numbers of people, who generally crowded about the guard house door, attracted by the afflicting cries of the tormented. Many of those persecuted in this manner, experienced additional anguish from the melted pitch trickling into their eyes. This afforded a rare addition of enjoyment to these keen sportsmen, who reiterated their horrid yells of exultation, on the repetition of the several accidents to which their game was liable upon being turned out; for in the confusion and hurry of escaping from the ferocious hands of these more than savage barbarians, the blinded victims frequently fell, or inadvertently dashed their heads against the walls in their way. The pain of disengaging this pitched cap from the head must be next to intolerable. The hair was often torn out by the roots, and not unfrequently parts of the skin were so scalded or blistered as to adhere and come off along with it. The terror and dismay that these outrages occasioned are inconceivable. A serjeant of the North Cork, nicknamed *Tom the Devil,* was most ingenious in devising new modes of torture. Moistened gunpowder was frequently rubbed into the hair, cut close, and then set on fire; some, while shearing for this purpose, had the tips of their ears snipt off; sometimes an entire ear, and often both ears were completely cut off; and many lost part of their noses during the like preparation. But, strange to tell, these atrocities were publicly practised, without the least reserve, in open day, and no magistrate or officer ever interfered, but shamefully connived at this extraordinary mode of quieting the people!—Some of the miserable sufferers on these shocking occasions, or some of their relations or friends actuated by a principle of retaliation, if not of revenge, cut short the hair of several persons whom they either considered as enemies or suspected of having pointed them out as objects for such desperate treatment. This was done with a view that those active citizens should fall in for a little experience of the like discipline, or to make the fashion of short hair so general that it might no longer be a mark of party distinction. Females were also exposed to the grossest insults from these military ruffians. Many women had their petticoats, handkerchiefs, caps, ribbons, and all parts of their dress that exhi-

bited a shade of green (considered the national colour of Ireland) torn off, and their ears assailed by the most vile and indecent ribaldry. This was a circumstance so unforeseen, and of course so little provided against, that many women of enthusiastic loyalty suffered outrage in this manner. Some of these ladies would not on any account have worn any thing which they could even imagine partook in any degree of *croppyism*. They were, however, unwarily involved until undeceived by these gentle hints from these kind guardians of allegiance.'

The county of Wexford was proclaimed by an order of the assembled magistrates on the 27th of April 1798; from which period forwards,

'Many magistrates of the county made themselves conspicuous in practising the summary mode of quieting the country, by the infliction of all kinds of torture. They seem, indeed, to have emulated or rather rivalled the conduct of the magistrates of other counties, who had made trial of the *salutary* effects of persecution somewhat sooner. In the several neighbourhoods of Ross, Enniscorthy, and Gorey, the people suffered most, as in each of these towns a magistrate started up eager for the glorious distinction of outstripping all others, each by his own superior deeds of death, deflagration and torture! but it is to be observed, that none of these men had ever before possessed either talents or respectability sufficient to entitle him to take a leading part; yet, if burning houses, whipping and half hanging numbers, hanging some all out, and shooting others, with attendant attrocities, constitute the characteristic of loyal and good magistrates, they must be allowed strong claim to eminence.'

The author animadverts with great spirit, and just severity, on these detestable proceedings, and thus concludes:

'I am firmly persuaded that the conduct of the magistrates before alluded to (and of some others not entitled to quite so much renown in this cause,) supported by the yeomen under their controul, together with the co-operation of the military, occasioned or rather forced the rising of the people in the county of Wexford.'

It is asserted by Mr. Hay that the stand made by the insurgents, and all the consequent calamities and devastations, were owing to cowardice; and that afterward many of those who basely ran away, and even several who took part with the insurgents, became more active in persecuting such men as deserted by those who were invested with authority, had been left to the mercy of the rebels, yet, by their prudent and temperate conduct, had saved numbers of lives, and had prevented the town from destruction. He justly observes that the military and civil authorities, by offering formally to surrender the town to the insurgents, had recognized them as regular enemies, and ought to have treated them accordingly. If the commander in chief was not bound to ratify the treaty into which Lord Kingsborough had entered with the town, and was

still

still less obliged to extend it to the camp, we believe that it would have been equally consistent with policy and with humanity to have acted in that manner. At all events, if the strictness of General Lake must be regarded as the proper line to be pursued, the Noble Lord had no alternative left, but that of returning himself into the custody of those who had released him.

The conduct of the judicial proceedings, the excesses of the troops, and the outrages committed by the yeomen, exhibit scenes as disgraceful as those which were chargeable on the rebellious multitude. Were a comparison to be instituted between the abominations committed on both sides,—a task which we beg leave to decline,—it would be difficult to determine against which it is that the mind most revolts. Justice, humanity, and every social tie were on each side equally violated. If most of those, who in such numbers have irretrievably tarnished their reputation, are too obscure and insignificant to suffer from the memorials of history, they may depend on it that their names, wherever mentioned among the subjects of this enlightened empire, will excite but one sentiment, that of confirmed detestation. Still there are bright passages in the history of these commotions. The virtuous and the humane will dwell with heart-felt pleasure on the exertions of a Fitzwilliam, of a Moira, and of a Fox, to arrest the torrent of calamity before it overran that unhappy country; the generous will peruse with kindred feeling the declarations of an Abercromby and of a Hutchinson, will do justice to the perseverance of a Cornwallis, and will applaud the noble clemency of a Moore and a Hunter; and memory will not easily relinquish a Sir James Fowlis, and a brigade-major Fitz-Gerald, who raised a name for justice and humanity, at a period and in scenes in which the ~~foulest~~ and most inveterate passions of our nature raged with uncontrouled fury. Blackest

We can easily believe that many of the leaders of the rebels were forced to assume that character, but we cannot credit this supposition to the extent for which Mr. Hay contends. This is the part, namely, the account of the character and views of the rebel leaders, which is least satisfactory in the volume before us. Fortunately, however, Mr. Gordon's narrative supplies this defect; and indeed, by means of the united labours of these respectable authors, the reader will be able to form a very just notion of the lamentable insurrection in the county of Wexford.

Jo.

ART.

ART. VII. *Euclidis Elementorum Libri Priores XII. Ex Commandini et Gregorii Versionibus Latinis. In usum Juventutis Academicæ. Edidit, pluribus in locis auxit, et in depravatis emendavit* Samuel, *Episcopus Roffensis.* 8vo. 9s. 6d. Boards. Payne and M'Inlay.

THE first part of this course was published in English, and has already been noticed by us *: but the present, and a third volume on Euclid's data, logarithms, &c. are composed in Latin. In the beginning of the preface, on which the Right Reverend author has bestowed considerable attention, he explains the cause of his departure from the ordinary plan of preceding editors, who have been contented to publish the first six books, with the eleventh and twelfth. The slight censure, however, on the supposed opinion of these editors, and the concomitant assertion that the truth or evidence of the rules of Algebra depends on the Elements of Geometry, do not please us: in other words, we do not regard the censure and the assertion as just and proper.

In the first six books, and in the 11th and 12th, the Bishop has followed the text of Commandine, as edited by Keil; and of the four intermediate books, the text is taken from Gregory's Latin version, corrected and amended: these corrections and emendations being many and important.

In the 5th book, the learned editor not only changes the order of the definitions, but rejects the 7th, and instead of it substitutes one, *quæ Veterum Geometrarum magis saperet.*

'*Prima ad secundam major esse dicitur quam in proportione tertiæ ad quartam (vel ad secundam majorem proportionem habere quam tertia ad quartam) quando minor aliqua quam prima ad secundam proportionem habet eandem, quam tertia ad quartam.*'

The R. R. author defends this alteration, and refutes an imagined objection against his definition, viz. that it is not evident that a less quantity exists, having to the second the same proportion which the third bears to the fourth; and his defence chiefly rests on the authority of Euclid, who himself takes for granted a truth of the same nature. For instance, in the 2d proposition of the 12th book, Euclid says; "As the square of *BD* is to the square of *FH*, so is the circle *ABCD* to the circle *EFGH*: for, if it be not so, the square of *BD* shall be to the square of *FH*, as the circle *ABCD* is to some space either *less than* the circle *ABCD*, or *greater than* it," &c.

'*Sed ut intra ea,* (says the Bishop) *quæ latius patent, diutius me non contineam,* hoc ipsum, *quod in definitione nostrâ* pro concesso sumi-

* See Rev. Vol. 36. N. S. p. 408.

tur,

tur, *ab* EUCLIDE IPSO *quoque* pro concesso sumptum est, *ubi in secundæ et aliarum Libri duodecimi propositionum demonstratione versatur; sicut et alios omnes facere necesse est, quotiescunque per* Exhaustionum *methodum, aliquid ponere volunt, aut certum esse ostendere; cum istius methodi principium et origo, illud nimirum sine quo nulla omnino esset, hoc ipsum sit, quod et nos in definitione nostrâ usurpavimus. Unde obiter quoque notandum, quam inominato nonnulli e Libro quinto propositionum decimæ octavæ et aliarum quarundam demonstrationes sustulerint, quales in* Commandini *Editione juxta* THEONEM *extant, et alias earum loco induxerint, non efficaciores, tædii autem et moliminis longe majoris. Et de his quidem hactenus.*'

Bishop Horsley conceives that the third definition is properly introduced; and consequently he dissents from the opinion of Barrow and Simson, who deemed this definition useless, as being metaphysical, and subservient to no mathematical purpose. Since the words "same ratio," or proportion, occur in the fifth definition, it is as well, perhaps, to give some general notion of ratio itself: but the omission of this definition does not appear to us a mathematical sin that cries to Heaven for vengeance. On this head, we think, the editor is impressive with unnecessary force.

The following passage, which terminates the preface, contains the Bishop's opinion of Robert Simson:

' Corollaria, Lemmata, *et* Scholia, *quæ locis innumeris in hâc nostrâ Euclidis Editione interjecta sunt, et quæ in receptis editionibus non inveneris, sive ex aliis desumpta, sive a nobis concinnata, asterismo notantur. Quibus auctoris nomen non adscribitur, ea omnia a nobis profecta sunt. Quæcunque autem sint ea, vel quales quales, quæ in Editione hâc nostrâ fecimus emendationes, ducem in plerisque eorum* SIMSONUM *certissime non secuti sumus; propter quod a nonnullis satis certo improbabimur, ab aliis fortasse, ut fieri solet, diversum experiemur judicium. Aliud interea nobis propositum fuit, et aliud unice in Euclide emendando, Euclide ipso duntaxat magistro uti, per omnia intueri eum, et ad illius mentem, quantum fieri potuit, omnia componere. Porro autem, licet in eandem cum nobis arenam descenderit, cum* SIMSONO *multoties non sentimus; ubique non astipulamur ejus de aliis Elementorum Editoribus judicio; quin et ex iis etiam quæ Operi suo inseruit, supervacanea nonnulla, aut infructuosa, impedita alia, et æquo longiora nobis semper visa sunt. Immo hoc ipsum erat, ut rem non diffiteamur, quod primo omnium ad Opus hoc nostrum excitavit nos, et tandem aliquando etiam ad conficiendum impulit—certa nimirum neque unquam immutata opinio, Euclidem a* SIMSONO *sermone Anglico donatum Juventutis Academicæ institutioni non sufficere, aut satis fideliter Veterum Geometrarum methodum, quæ nunquam non ἀκριβεστάτη est, iis in conspectu ponere. Sed neque interea quoque, in egregii istius Viri exercitationibus, non confitemur iidem inesse multa et artificii singularis, et exquisitæ elegantiæ, quibus spartam quam nactus est feliciter ornavit, et unde laudem sibi jure adeptus est non mediocrem. Valeas, Lector, et quæ tibi in manus tradita sunt, æqui bonique consulas.*'

The

The 12th Axiom, concerning parallel lines, a subject which has caused so many investigations, is retained; and at the end of the 28th proposition, Dr. H. gives what he calls a demonstration of it. Our astonishment during the perusal of this proof was not small. That a mathematician, a stickler for ακριβεια; who severely censures the accurate Robert Simson for inac uracy; and who had before him, on the subject of parallel lines, the learned and ingenious argumentations of that geometer, with the strict deductions and acute observations of Playfair and Ingram; should have so grossly paralogized, is indeed wonderful. If any meaning, by which we may arrive at a conclusion, is to be attached to the author's words, the very thing which is the object of proof is supposed. In fact, a mystical word, *deflectitur*, is introduced: but by what spell and potent charm that term is to produce the meeting of two lines, drawn according to the conditions of the axiom, we are utterly unable to conjecture. With this specimen of the Right Reverend author's mathematical acuteness in our view, we listen with a great disposition to incredulity to his unsupported censure of Simson.

We shall consider the 3d vol. in another article. R.W.

ART. VIII. *Scenes of Infancy:* descriptive of Teviotdale. By John Leyden. 12mo. pp. 184. 6s. Boards. Longman and Rees.

THE charms of local attachment are peculiarly congenial to descriptive and pathetic poetry. With the scenes of our first home, we identify the real or fancied happiness of careless childhood, and the warm and abiding impression of new existence. The very circumstance of their individuality clothes them with interest, and trains of tender associations endear them to our hearts. In proportion to the extensive influence of local predilections, has that influence been illustrated and embellished by writers of taste and sensibility. The theme is truly attractive: but repetition has rendered it familiar. In painting our favourite haunts, we should, therefore, have recourse to varied if not to original colouring; we should lay hold of peculiar incidents or sentiments connected with the subject; and, above all, we should select the most prominent and characteristic features, and touch them at once with delicacy and boldness. Every thing of a vague and general complexion should be studiously avoided, and the physical and moral aspect of the district alone brought into view. Minute and tedious description, also, though it may be tolerated, or even re-

lished by a native of the country which is delineated, will, in the judgment of the impartial, weaken the effect of a sketch that may be pronounced faultless in every other respect.

In so far as the present writer has been guided by these views, he claims our most sincere approbation. In the conduct of his poem, however, we occasionally remark the want of a regular progress of thought, and of appropriate pictures and images. The effusion which professes to recall the days of playful innocence, and to celebrate pastoral life as it is exhibited on the banks of the Teviot, should breathe simplicity and sweetness, unmixed with remote digressions or pedantic allusions. The performance, though in various respects highly creditable to the author's reputation, is needlessly prolonged, and sometimes presents us with learning when we looked for feeling.

Of the four parts into which this poem is rather unnecessarily divided, the first is the most interesting, and is pleasingly heightened by the concluding address to Aurelia:

'Ah! dear Aurelia! when this arm shall guide
Thy twilight steps no more by Teviot's side,
When I, to pine in eastern realms, have gone,
And years have passed, and thou remain'st alone,
Wilt thou, still partial to thy youthful flame,
Regard the turf, where first I carved thy name,
And think thy wanderer, far beyond the sea,
False to his heart, was ever true to thee?
Why bend, so sad, that kind, regretful view,
As every moment were my last adieu?
Ah! spare that tearful look, 'tis death to see,
Nor break the tortured heart that bleeds for thee!
That snowy cheek, that moist and gelid brow,
Those quivering lips, that breathe the unfinished vow,
These eyes, that still with dimming tears o'erflow,
Will haunt me, when thou canst not see my woe.
Not yet, with fond but self-accusing pain,
Mine eyes, reverted, linger o'er the main;
But, sad, as he that dies in early spring,
When flowers begin to blow, and larks to sing,
When Nature's joy a moment warms his heart,
And makes it doubly hard with life to part,
I hear the whispers of the dancing gale,
And, fearful, listen for the flapping sail,
Seek, in these natal shades, a short relief,
And steal a pleasure from maturing grief.
'Yes! in these shades, this fond, adoring mind
Had hoped, in thee, a dearer self to find,
Still from thy form some lurking grace to glean,
And wonder, it so long remained unseen;
Hoped, those seducing graces might impart
Their native sweetness to this sterner heart,

While those dear eyes, in pearly light that shine,
Fond thought! should borrow manlier beams from mine.
Ah! fruitless hope of bliss, that ne'er shall be!
Shall but this lonely heart survive to me?
No! in the temple of my purer mind,
Thine imaged form shall ever live enshrined,
And hear the vows, to first affection due,
Still breathed—for love, that ceases, ne'er was true.'

The ensuing lines are conceived in the true spirit of poetical romance:

'The waning harvest moon shone cold and bright;
The warder's horn was heard at dead of night;
And, as the massy portals wide were flung,
With stamping hoofs the rocky pavement rung.
What fair, half-veiled, leans from her latticed hall,
Where red the wavering gleams of torch-light fall?
'Tis Yarrow's fairest flower, who, through the gloom,
Looks, wistful, for her lover's dancing plume.'

The apostrophe to the nightingale is also worthy of quotation:

'Sweet bird! how long shall Teviot's maids deplore
Thy song, unheard along her woodland shore?
In southern groves thou charm'st the starry night,
Till darkness seems more lovely far than light;
But still, when vernal April wakes the year,
Nought save the echo of thy song we hear.
The lover, lingering by some ancient pile,
When moonlight meads in dewy radiance smile,
Starts, at each woodnote wandering through the dale,
And fondly hopes he hears the nightingale.
O! if those tones, of soft enchanting swell,
Be more than dreams, which fabling poets tell;
If e'er thy notes have charmed away the tear
From Beauty's eye, or mourned o'er Beauty's bier;
Waste not the softness of thy notes in vain,
But pour, in Dena's vale, thy sweetest strain!'

Mr. Leyden is very fond of the epithet *sweet*: but the finest word in the language, if too often introduced, ceases to please. *Ezlar* is more than once applied to rocks. *Ashlar* is a term used by masons to denote stones as they come from the quarry. We are likewise informed that *eshlar-wark* is, in Scotland, synonymous with hewn or smoothed work. *Rowans* is Scotish for the berries of the mountain-ash. *The pipe and bladder* is no very happy periphrasis for the *bag pipe*. *Drake* is the male of the duck, and not a *dragon*. *Moss*, in the sense of *morass*, is Scotish; and Mr. L. must *waddle* out of it as he best can.

The

The versification is, for the most part, abundantly smooth: but *Ruberslaw* is a sound peculiarly harsh; and such lines as these require softening:

'And shuts each shrinking star's refulgent eye.'
'The dark winged Erne impetuous glanced to view.'
'Reared the huge piles by Nile's broad moon horned flood.'
'Roxburgh! how fallen, since first, in Gothic pride.'

A modest allowance of explanatory notes is subjoined; and the volume is handsomely printed: but, independently of decorations and patronage, it deserves a place on the shelf of poetical readers.

Muir.

ART IX. *Elements of Science and Art:* being a familiar Introduction to Natural Philosophy and Chemistry. Together with their Application to a variety of elegant and useful Arts. By John Imison. A new Edition, considerably enlarged, and adapted to the improved State of Science. 8vo. 2 Vols. 1l. 5s. Boards. Harding, &c.

THE first edition of this work was noticed by us in a brief article*: but it is now so greatly enlarged that we have viewed it as a new production; and we think that its merits are considerable. Though, however, we have perused it with considerable satisfaction, yet we find that it is one of those books on which we have little critically to comment: since no new theories are advanced in it, and no received opinions are controverted. Perhaps every thing which it contains is to be found elsewhere; and we presume that the author does not claim the praise of having propounded new matter, but that of perspicuous and dextrous arrangement, and of having judiciously drawn from each department of science and art its proportionate share, suitably to the object of his publication.

In order to shew how wide a scope he has taken, we subjoin the general heads. Vol. I. Mechanics, Pneumatics, Hydrostatics, Hydraulics, Optics, Electricity, Galvanism, Magnetism, Astronomy. Vol. II Chemistry, Drawing, Mechanical Means for copying Drawings, Bleaching, Dyeing, Calico Printing, Tanning, Refining Metals, Pottery, Manufactures of Glass, Varnishing, Japaning, Bronzing, Lacquering, Gilding, Silvering, Tinning, Soldering, Moulding and Casting, Cements, Ink Making, Removing Stains, Staining Wood, Miscellaneous Articles. From this enumeration, it is plain that there is very little in Science and Art on which he does not touch: much evidently

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* See M. Rev. N. S. Vol. lxxiii. p. 394.

cannot be said on each, but what is given is stated properly and judiciously. The articles of Electricity and Astronomy, however, still occupying the same number of pages, might have been made to convey to the reader more useful information: at present they are rather trifling; certainly not the best in the book. Its multifarious information must render this compilation useful and entertaining: though if a person wishes to enter profoundly into the science of mechanics, he will not here find sufficient information; or if in chemistry he desires to rival Vauquelin and Berthollet, he must have recourse to other treatises; or if he purposes to submit to the test of practice the principles of dyeing, he must seek for works more particular in method and detail. To excite curiosity, however, in the youthful mind,—for the use of those whose occupations preclude them from deep researches,—or for those who, profoundly skilled in one particular department of science or literature, wish not to be ignorant of the rules and principles which prevail in other branches,—these volumes are well adapted, and may be very convenient.

As specimens, we select the two following passages:

'WHEEL-CARRIAGES.

'It is very probable, that in the infancy of the arts, sledges were used before wheels were invented, or at least before the application of them became general. Even now, indeed, sledges are employed for certain purposes in our own country, notwithstanding the number of wheel-carriages used in it from time immemorial.

'In some of the cold climates, where ice is to be met with in considerable quantity, and the ground is covered with frozen snow for a great part of the year, sledges are much in use, and run upon the smooth surface of the earth with as great ease as wheels run upon the ordinary ground. Upon very smooth ice, indeed, or upon any other body perfectly smooth, wheels would not turn readily; for the only reason why they turn in the ordinary way is the continual inequalities they meet with.

'On common roads, wheels meet with obstructions at the bottom, which retard that part; the upper part is in consequence drawn forward, and a circulating motion takes place.

'The advantage of wheels over sledges may be understood from the following considerations: A sledge, in sliding over a plane suffers a friction equivalent to the distance through which it moves; but if we apply to it an axle, the circumference of which is six inches, and that of the wheels eighteen feet, it is plain that when the carriage moves eighteen feet over the plane, the wheels make but one revolution; and as there is no sliding of parts between the plane and the wheels, but only a mere change of surface, no friction can take place there, the whole being transferred to the nave acting on the axle; so that the only sliding of parts has been betwixt the inside of the nave and the axle; which, if they fit one another exactly, is

no

no more than six inches, and hence it is plain, that the friction must be reduced in the proportion of one to thirty-six. Another advantage is also gained, by having the surfaces confined to so small an extent; by which means they may be more easily kept smooth, and fitted to each other. The only inconvenience is the height of the wheels, which must in all cases be added to that of the carriage itself.

'By means of this circulatory motion, the friction becomes very much less than what it would be if the weight were drawn along the ground upon a sledge; insomuch, that a four-wheeled carriage may be drawn with five times as much ease as one that slides upon the same surface as a sledge.

'By applying wheels to a carriage, the friction is lessened, in the proportion of the diameters of the axles and hollow parts of the naves to that of the wheels.

'Large wheels have also the advantage over small ones in overcoming obstacles, because they act as levers, in proportion to their various sizes. All wheels, but especially small ones, are apt to sink into the ground over which they pass, and thus produce a constant obstacle to their progress, which the large ones most easily overcome.

'In all four-wheeled carriages, the fore-wheels are made of a less size than the hind ones, in order to enable them to turn in less room; but the carriage would go much easier, if the fore-wheels were as high as the hind ones.

'It is plain, that the small wheels must turn as much oftener round than the great ones, as their circumferences are less. And, therefore, when the carriage is loaded equally heavy on both axles, the fore-axle must sustain as much more friction, and consequently wear out as much sooner than the hind axle, as the fore-wheels are less than the hind ones. And though this points out that the greatest weight should be laid upon the large wheels, yet it is generally the practice to put the greatest load over the small wheels, which not only makes the friction greatest where it should be least, but also presses the fore-wheels deeper into the ground than the hind wheels, notwithstanding the former are with more difficulty drawn out of it than the latter.

'It is true, that when the road is much up-hill, there is danger in loading too much the hind wheels, lest the fore-wheels should be tilted up.

'Every one knows what an outcry was raised by the generality, if not the whole body, of the carriers, against the broad wheel act; and how hard it was to persuade them to comply with it, even though they were allowed to draw with more horses, and carry greater loads than usual. Their principal objection was, that as a broad wheel must touch the ground in a great many more points than a narrow one, the friction must, of course, be just so much the greater, and consequently there must be so many more horses to draw the waggon. But they did not consider, that if the whole weight of the waggon and the load in it bear upon a great many points, each sustains a proportionally less degree of weight and friction, than when it bears only upon a few points; so that what is wanting in one, is made up in the

other; and therefore the friction will be just equal under equal degrees of weight, as may be shewn by the following easy experiment:

'Let one end of a piece of packthread be fastened to a brick, and the other end to a common scale for holding weights; then put the brick edgeways on the table, and let the scale hang over the side; put as much weight into the scale as will just draw the brick along the table. Then taking back the brick to its former place, lay it *flat*, and leave it to be acted on by the weight in the scale as before, and it will draw it along with the same ease as when it lay upon its edge. In the former case, the brick may be considered as a narrow wheel, on the ground, and in the latter as a broad wheel. And since the brick is drawn along with equal ease, whether its broad side or narrow edge touch the table, it shews that a broad wheel might be drawn along the ground with the same ease as a narrow one (supposing them equally heavy) even though they should drag, and not roll, as they go along.

'As narrow wheels are always sinking into the roads, they must be considered as constantly going up hill, even on level ground; and their sides must sustain a great deal of friction by rubbing against the ruts. But both these inconveniences are avoided by using broad wheels; which, instead of cutting and ploughing up the roads, roll them smooth, and harden them, as experience testifies in places where they have been used.

'If the wheels were always to go upon smooth and level ground, the best way would be to make the spokes perpendicular to the naves and to the axles; because they would then bear the weight of the load perpendicularly, which is the strongest way for wood. But because the ground is generally uneven, one wheel often falls into a cavity, or rut, when the other does not; and then it bears much more of the weight than the other does; in which case, concave, or dishing-wheels, are best; because, when one falls into a rut, and the other keeps upon high ground, the spokes become perpendicular in the rut, and therefore have the greatest strength when the obliquity of the load throws most of its weight upon them; whilst those on the high ground have less weight to bear, and therefore need not be at their full strength; so that the usual way of making the wheels concave is best.'

'*Principles of Dyeing.*

'The substances commonly employed for clothing may be reduced to four; namely, wool, silk, cotton and linen.

'Permanent alterations in the colour of cloth can only be induced two ways; either by producing a chemical change in the cloth, or by covering its fibres with some substance which posesses the wished-for colour. Recourse can seldom or never be had to the first method, because it is hardly possible to produce a chemical change in the fibres of cloth without spoiling its texture and rendering it useless. The dyer, therefore, when he wishes to give a new colour to cloth, has always recourse to the second method.

'The substances employed for this purpose are called *colouring matters*, or *dye stuffs*. They are for the most part extracted from animal

and vegetable substances, and have usually the colour which they intend to give to the cloth.

'Since the particles of colouring matter with which cloth, when dyed, is covered, are transparent, it follows, that all the light reflected from dyed cloth must be reflected, not by the dye stuff itself, but by the fibres of the cloth below the dye stuff. The colour therefore does not depend upon the dye alone, but also upon the previous colour of the cloth. If the cloth be *black*, it is clear that we cannot dye it any other colour whatever; because as no light in that case is reflected, none can be transmitted, whatever dye stuff we employ. If the cloth were red, or blue, or yellow, we could not dye it any colour except black; because, as only red, or blue, or yellow rays were reflected, no other could be transmitted. Hence the importance of a fine white colour, when cloth is to receive bright dyes. It then reflects all the rays in abundance, and therefore any colour may be given, by covering it with a dye stuff which transmits only some particular rays.

'If the colouring matters were merely spread over the surface of the fibres of cloth by the dyer, the colours produced might be very bright, but they could not be permanent; because the colouring matter would be very soon rubbed off; and would totally disappear whenever the cloth was washed, or even barely exposed to the weather. The colouring matter then, however perfect a colour it possesses, is of no value, unless it also adheres so firmly to the cloth that none of the substances usually applied to cloth, in order to clean it, &c. can displace it. Now this can only happen, when there is a strong *affinity* between the colouring matter and the cloth, and when they are actually combined together in consequence of that affinity.

'Dyeing then is merely a chemical process, and consists in combining a certain colouring matter with fibres of cloth. This process can in no instance be performed, unless the dye stuff be first reduced to its integrant particles: for the attraction of aggregation between the particles of dye stuffs is too great to be overcome by the affinity between them and the cloth unless they could be brought within much smaller distances than is possible while they both remain in a solid form. It is necessary, therefore, previously to dissolve the colouring matter in some liquid or other, which has a weaker affinity for it than the cloth has. When the cloth is dipped into this solution, the colouring matter, reduced by this contrivance to a liquid state, is brought within the attracting distance; the cloth therefore acts upon it, and from its stronger affinity, takes it from the solvent, and fixes it upon itself. By this contrivance too, the equality of the colour is in some measure secured, as every part of the cloth has an opportunity of attracting to itself the proper proportion of colouring particles.

'The facility with which cloth imbibes a dye, depends upon two things; namely, the affinity between the cloth and the dye stuff, and the affinity between the dye stuff and its solvent. It is directly as the former, and inversely as the latter. It is of importance to preserve a due proportion between these two affinities, as upon that proportion much of the accuracy of dyeing depends. If the affinity between the colouring matter and the cloth be too great, compared with the affinity between the colouring matter and the solvent, the cloth will take the

dye too rapidly, and it will be scarcely possible to prevent its colour from being unequal. On the other hand, if the affinity between the colouring matter and the solvent be too great, compared with that between the colouring matter and the cloth, the cloth will either not take the colour at all, or it will take it very slowly and very faintly.

'Wool has the strongest affinity for almost all colouring matters, silk the next strongest, cotton a considerably weaker affinity, and linen the weakest affinity of all. Therefore in order to dye cotton or linen, the dye stuff should in many cases be dissolved in a substance for which it has a weaker affinity than for the solvent employed in the dyeing of wool or silk. Thus we may use oxyde of iron dissolved in sulphuric acid, in order to dye wool; but for cotton and linen, it is better to dissolve it in acetous acid.

'Were it possible to procure a sufficient number of colouring matters, having a strong affinity for cloth, to answer all the purposes of dyeing, that art would be exceedingly simple and easy. But this is by no means the case; if we except indigo, the dyer is scarcely possessed of a dye stuff which yields of itself a good colour, sufficiently permanent to deserve the name of a dye.

'This difficulty, which at first sight appears insurmountable, has been obviated by a very ingenious contrivance. Some substance is pitched upon, which has a strong affinity, both for the cloth and the colouring matter. This substance is previously combined with cloth, which is then dipped into the solution containing the dye stuff. The dye stuff combines with the intermediate substance, which, being firmly combined with the cloth, secures the permanence of the dye. Substances employed for this purpose are denominated *Mordants*.

'The most important part of dyeing is undoubtedly the proper choice and the proper application of mordants; as upon them the permanency of almost every dye depends. Every thing which has been said respecting the application of colouring matters, applies equally to the application of mordants. They must be previously dissolved in some liquid, which has a weaker affinity to them than the cloth has, to which they are to be applied; and the cloth must be dipped, or even steeped in this solution, in order to saturate itself with the mordant.'

Numerous plates are added, illustrative of the various subjects; and a general Index is given with the second volume. **R.W.**

ART. X. *Senilities*; or, Solitary Amusements: in Prose and Verse: with a cursory Disquisition on the future Condition of the Sexes. By the Rev. Wm. Graves, Editor of The Reveries of Solitude, Spiritual Quixote, Columella, &c. Crown 8vo. pp. 315. 6s. Boards. Longman and Co.

WHEN, in the course of our literary labours, we recognize an old acquaintance, whom we have for many years been in the habit of esteeming, we feel pleasure similar to that which is produced by the unexpected meeting of friends after a long

a long and lamented separation. Such is the effect which we at present experience from the perusal of this production of the Rev. Mr. Graves; whom we now once more introduce to the notice and approbation of the public. Whatever the modesty of Mr. G. may intend to intimate by the term '*Senilities*,' we have the pleasure of saying that there is no part of the volume, from which we should have drawn any unfavourable conclusions respecting the mental decline of the author, or in which we should even have perceived the infirmities naturally incident to his venerable age. The preface is written in his usual manner, with much ease and pleasantry; and he tells us that, as the tedious preachers in Charles the Second's time, when the congregation began to be tired after two hours' listening, would say "*once more* and I have done;" so we may rest assured that this publication is on his part "positively the last time of performing." We believe that there has seldom (if ever) been such an instance of performers of this kind retaining their skill and power to please at the advanced period of 86; and we trust that he will avail himself of a common precedent, and appear more last times than one.

The first half of this volume consists of short essays on different subjects, which are treated partly in a serious and partly in a jocose manner. At the head of these stands the disquisition announced in the title-page, 'on the future condition of neglected virgins.'—As Mr. Graves is a clergyman, there is the more propriety in his discussing any curious question in theology: but on this subject he differs from St. Hilary, Dr. Priestley, and others; and in such a discordancy of opinion among learned divines, on so intricate a point, we shall not have the presumption to offer our opinion, nor to act as umpire between the parties. We shall, however, give our fair readers some idea of the matter under discussion.—The certainty of a future state, Mr. G. contends, is demonstrable from the very nature and condition of man in this transitory world; and he justly observes that, in respect to the particulars of that state, all is uncertain and merely conjectural. From some hints, nevertheless, which the scriptures afford, he concludes that the same sentiments and affections, though purified and refined from all earthly grossness, will subsist hereafter; and that they will contribute, as in this life, though in a far more exalted manner, to the social endearments of the blessed. Hence he infers that there will also be a sexual distinction in another world, notwithstanding our Saviour's remark that "in heaven they neither marry nor are given in marriage."

'St. Paul, indeed, mentions a considerable *change* which the human frame will undergo on that awful occasion: that "it is sown in cor-

ruption, it is raised in incorruption, it is sown in weakness, it is raised in power," it is sown a natural, or merely *animal* body, it is raised a spiritual, or spiritualized body: But he no where says, that a female body will be raised a male, or a male a female body. And if there is to be only one sex, the ladies surely have as good a claim to that exclusive privilege as the men have. Nay as we are to have bodies of some kind or other, and "are to be as the *angels* in heaven;" the fair sex, in their immaculate purity and virgin innocence, certainly approach nearer to our present ideas of those angelic beings than the males do.

'In short, "every seed," as St. Paul says, "will have its own body;" and we might, with as much reason, expect a grain of wheat to produce an ear of barley, an acorn an apple tree, or the chrysalis of a butterfly to be transformed into an humming bird or a robin red breast, as those to rise up males who were safely deposited in a female form in the tomb.'

'Now, though there will be no marriages in heaven, and we cannot promise the hapless subjects of this Essay good husbands; yet, what is much better, they will find there an host of cordial friends and sincere lovers. And this delicious passion of love, instead of being restrained to a single object, will probably be infinitely extended and exalted into that universal benevolence, or *charity*, so strongly enforced in the Gospel. And in our spiritualized bodies we shall enjoy that refined intercourse of affection with the whole sex, which we now experience in the contracted sphere of the connubial state. And, as such an intercourse will greatly augment the happiness of heaven, we can hardly doubt that it will subsist there, and produce its genuine effect.'

'In short, though we must not expect a Mahometan paradise, we can hardly, I think, doubt that there will be such a beatific commerce and reciprocal affection between the souls of the good of different sexes as will constitute the chief felicity of heaven.'

'And those neglected virgins, who have meekly submitted to their destiny here, will meet with those endearments of which, from some personal defects, perhaps, they have here been unfortunately deprived.'

'Hence, then, I have endeavoured to extract matter of "*consolation* to those *neglected virgins*," who, by a pious resignation, and by cultivating universal benevolence, and forming virtuous habits, shall qualify themselves for the society of the saints in heaven.'

Whatever may be the truth in this matter, respecting which we have only the light of reason to influence our decision, the essay is truly ingenious and moral in its tendency; and we highly recommend it to the perusal of our readers: especially those who seem destined to "live, grow, and die in single blessedness *." In the mean time, we are desirous of seeing our fair friends, as many *as are called to that state*, enjoying in the present world the happiness of "the rose distilled."

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* Shakspeare.

In

In the essay on Profaneness, the author observes that such a violation of duty should be treated like disloyal and seditious words: 'when an half-bred *gentleman*, through mere wantonness, profanes that name, which every one is supposed to reverence, in polite, much more in serious and religious company, he should be treated as a militaty officer would, or should, treat an ill-bred fellow, who vented treasonable or disrespectful expressions against the sovereign whom he serves.' This is stating the offence in a very *striking* light; and it is in reality of a far more serious nature than any transgression against an earthly potentate. This illustration of the offence, in point of obedience to a sovereign, may perhaps convince many of their guilt, who profess to be loyal, and yet dare to be profane.

On the sacred scriptures, Mr. Graves thus declares his sentiments:

'No one can have a more profound veneration for the sacred Scriptures than I have. And though Mr. Paine says, "he could have written a better book than the Bible," I defy him, and all the philosophers in France, to produce a work ancient or modern, of so extensive and multifarious a kind, in which the historical part is written with greater beauty and simplicity, or from which a better system of politics, or (allowing for the prevalence of some opinions in different ages of the world) a purer scheme of morals can be extracted; or, without any exception, where an equal or so divine an institute of religion has been offered to mankind.'

With regard to the question about which philosophers are divided, whether or not there is implanted in the mind of man what they call "The Moral Sense," which Bp. Warburton and Mr. Graves admit, while Locke and Dr. Paley deny it, we shall only remark that it appears to us a dispute about the faculty of reason which is given to man, and by which, according to the received impressions and principles inculcated by education, he is able to *feel at once*, in proportion to the strength of his reason, the fitness or unfitness of certain actions. What is in reality a regular deduction of reason is performed by the mind so instantaneously, that it obtains, in common language, the name of *feeling*; and hence *that* appears an *implanted perception*, which is in effect a mechanical and rapid process performed by reason.

The criticism which occurs in another essay, on the expression used by Shakspeare—"a green and yellow melancholy," we are much inclined to question: 'As most of the monuments in that part of the country where Shakspeare was born are made of alabaster of a pale yellow cast, it contracts a greenish mould in a damp church, and, I make no doubt, suggested that

that idea.' The truth is, we believe, that Shakspeare copied from Nature, and not from any monumental figure: for it is well known to the medical world that, in certain pining disorders, that peculiar hue of "green and yellow" generally tinges, in a very striking manner, the female countenance.

The author's remarks on Self-importance will generally excite a smile of approbation:

'I sometimes meet a man so stately in his deportment, so haughty in his look, with such an air of defiance in his whole manner, that I shrink from his appearance, and feel myself annihilated in his presence. Yet, on recovering from my dismay, and reflecting on the *limited* power and capacity of every human being, I find, probably, on inquiry, the real character of this illustrious personage: that his pompous air conceals a mean spirit, and that the solemn countenance is only a veil for his ignorance and insignificance.

'Such are many of those colossal figures who seem to "bestride the world, and under whose legs, as it were, we petty mortals must *peep about*," to find a loop-hole to pass by them, without being crushed against the wall, or jostled into the kennel.

'One man, whom I have met, perhaps, at a third place, assumes a reserved and distant air, lest I should claim him as an acquaintance. Another man, with eyes fixed, looks strait forwards, and though our elbows almost touch, seems unconscious that any one is near him, or at least worth his notice.

'A third is near-sighted, and though we have met, perhaps, on various occasions, has not the honour to recollect my name. All these are different stratagems of pride and self-importance, which, though not reducible to the precise rules of quarrelling, "like the lie direct," and for which we can call a man to account; yet may and ought to be resented, or rather treated with the contempt which they deserve.

'I remember a stout fellow with a most terrific countenance, who, if he met a man strutting along in sublime contemplation of his own importance, and a sovereign contempt of all around him, he would, on a sudden, run up to him, turn his large white eyes upon him, and cry, Boh! This, it may be supposed, often involved him in a scuffle, or rough rencounter; but generally raised a laugh at the expence of the haughty despot.

'A proud look is an insult on the public. Pride was not made for man: nor for woman neither.'

The chearful little essay on the tax on Port Wine will amuse the reader. The author suggests an expedient under this heavy impost:

'But, after all, supplies must be raised, and taxes be imposed on the necessaries as well as luxuries of life: let us then mak. the best of what cannot be avoided.

'Perhaps, the dearness of wine may be attended with the same beneficial effects as the late scarcity of bread; and make us more sparing in the use of it, or find some substitute in its room.

'Let

'Let the ladies then, after dinner, be content with three glasses, the number of the Graces; and the gentlemen with nine, the number of the Muses.'

If we rightly recollect, Sir William Temple was not so bountiful as Mr. Graves in his allowance to the gentlemen. He allotted a *third* glass to *good humour*, and a fourth to our *enemies*. Perhaps Mr. Graves's system, although it is founded on the proportions of Heathen Mythology, will be more commonly approved.

The second portion of the volume consists of a variety of compositions in verse, intitled—*poetical*, *panegyrical*, *humorous*, *miscellaneous*. In so multifarious a collection, it is difficult to give any general character of the whole. Indeed, it will be apparent to the reader that many of these compositions are the unlaboured effusions of a gay and vivacious mind, and are not so much intended to display *the poet*, as to amuse the composer, and to furnish recreation for his friends, who can be pleased without exercising the severity of a critic.—At the same time, we must do the author the justice to add that several of these pieces have merit considered as poetry, and will be commended even by the fastidious critic. We give an extract from the humorous collection:

'JOHN BALL'S* SEDITIOUS TEXT.

"When Adam delv'd, and Eve span,
Who was then a Gentleman?"

'ANSWER.

'When naked all, like Eve and Adam,
Your Joan might be as good as Madam;
And, tillage then the only trade,
We all had learnt to use the spade.
But, tho' mankind are still the same,
And *equal rights* by nature claim;
Yet, if no social laws existed,
And every man did what he listed;
If all mankind must *dig* or *spin*,
You'd have no covering but your skin.
For, who would weave, or be your taylor?
Who'd be a soldier or a sailor?
Who'd make your tables or your shelves?
'Troth! you must make them all yourselves.
Let each man then assist his neighbour,
And each perform some useful labour:

'* A fanatic priest in the reign of Richard II., who by his seditious sermons and rhymes, without reason, sowed the seeds of Wat Tyler's Rebellion.'

Thus

Thus various arts would be invented,
And those, now poor and discontented,
Might soon grow rich, by labouring more;
While *lazy* folks must needs be poor:
For why should they, who take no pains,
Rob others of their honest gains?
While some obey, and some command,
And each man lends an helping hand;
While those best skill'd, the vessel steer,
Each may be happy in his sphere.
In short, 'tis evident, you see,
That different ranks there needs must be;
There must be then, say what you can,
That *dreadful* thing—a Gentleman!'

We observe repeatedly in these poetical pieces the expression "I wont" without the auxiliary—was. We shall not, however, detain our readers with any verbal or trivial remarks, but conclude with recommending this sensible and good-humoured volume to general notice.

Man?

ART. XI. *An Experimental Inquiry into the Nature and Propagation of Heat.* By John Leslie. 8vo. pp. 570 and 9 Plates. 14s. Boards. Mawman. 1804.

THE philosophical world is by no means unacquainted with the name of the author of this volume, although no separate detail of his labours in the cause of science had previously issued from his pen. We are glad, however, to see that he has at length turned his attention to the production of an elaborate work; and that he has selected for investigation the important subject of Heat, which has lately been much discussed, and which forms so essential a part of our chemical and philosophical knowlege. The publication before us has already attracted much notice from scientific men: notice to which we conceive it to be fully intitled; and every degree of which, that is within our power to assign to it, we shall now bestow on it by entering into a copious and patient analysis of its contents. In the execution of this duty, we shall follow, in part, the plan of the author; first stating the experiments, and then explaining the theory of which they are the ground-work. A previous description of the apparatus, however, is necessary; and we shall give it in Mr. Leslie's own words:

'The principal articles of the apparatus were *specula* or reflectors made of tinned iron. Of these I had several, of different dimensions; from twelve to about fourteen inches in diameter, and with a depth of concavity from $1\frac{3}{4}$ to near $2\frac{1}{2}$ inches. It cost me no small trouble to obtain what I wanted. I had to make repeated trials before I could find

find an artist skilful enough to execute the reflectors with any tolerable precision, or who was disposed to listen to my directions. But by dint of perseverance, my sanguine wishes were at length gratified. The reflectors were hammered out of block-tin, and highly finished, exhibiting an admirable brightness, smoothness, and regularity of surface. Aware that the aberration from the focus in reflection must be very considerable when large segments of hollow spheres are used, I sought to procure the parabolic figure. I formed thin slips of mahogany with great accuracy, into segments of parabolas of different sizes, to serve as gages for the workman; and with some dexterity, and the frequent changing of the hammers, the reflectors were fashioned to fit those shapes with surprizing exactness. As it was my object to obtain the most powerful reflectors that could be made in this way, I was at pains to procure tin-plates of the largest dimensions, and to have them hammered to the greatest depth of concavity that the metal would bear without being fractured. Exposed to the direct light of the sun, these reflectors collected the rays into a pretty distinct focus, scarcely exceeding half an inch in diameter, so that the whole errors of the figure did not occasion a deviation of more than a quarter of an inch on either side. And though the sun's image was therefore one hundred times more diffuse than if the figure had been perfectly true, yet the effect of those reflectors was very remarkable, and even comparable with that of concave mirrors; for bits of wood or cloth, held in the focus, were burnt through or set on fire, in a few seconds.'

The second part of the apparatus, intended to contain hot water, consisted of hollow tin cubes, formed exactly, and hammered to a smooth and bright surface:

'These canisters had an orifice at the middle of the upper side, from half an inch to an inch in diameter, and the same in height, fitted to receive a cap through which was inserted a thermometer, whose bulb might reach nearly to the centre of the water. The cubes were of different sizes; of three, four, six, and ten inches. In two of them, namely, those of four and ten inches wide, the lid was not soldered, but could be adapted or removed at pleasure; and there being no occasion for an aperture, the stem of the thermometer was passed through a short pipe.'—

'One side was constantly kept clean and bright, the opposite one was covered with writing paper pasted to it, or was painted over with a coat of lamp-black, mixed up with as little size as would make it take a body. The other sides, being allotted for miscellaneous service, were, according as the case required, coated indifferently with tin foil, or coloured papers, or different pigments, or had the nature of their surface changed by mechanical or chemical agents.'

The canisters were placed on stools, so contrived as to have their centres in the horizontal axis of the reflector.

The chief instrument in the apparatus is the *differential thermometer:* which consists of a tube bent into the form of the letter U, each extremity being closed by a hollow ball, and sulphuric acid tinged with carmine being introduced into the tube. Each leg

leg of the instrument may be from three to six inches in height, and the balls from two to four inches apart. The lower end of the syphon is cemented into a wooden base, so that the two balls may be on a level with the centre of the speculum.

'A moment's attention (says the author) to the construction of this instrument will satisfy us that it is affected only by the *difference* of heat in the corresponding balls, and is calculated to measure such difference with peculiar nicety. As long as both balls are of the same temperature, whatever this may be, the air contained in the one will have the same elasticity as that in the other, and consequently the intercluded coloured liquor, being thus pressed equally in opposite directions, must remain stationary. But if, for instance, the ball which holds a portion of the liquor be warmer than the other, the superior elasticity of the confined air will drive it forwards, and make it rise in the opposite branch above the zero, to an elevation proportional to the excess of elasticity or of heat. It is easy, after the mode practised in the case of the hygrometer, to fix the magnitude of the degrees for any particular instrument, and, if it were expedient, other methods might be proposed which are applicable to the present instance. The interval between freezing and boiling water being distinguished into an hundred equal parts called *centigrade*, each of these subdivided decimally constitute the degrees which I employ, and which, following up the same system of nomenclature, would be termed *milligrade*. With the measures which I have stated, each differential thermometer will contain from 100 to 150 degrees. I would observe, however, that such graduation is seldom positively required, and that, in most cases, it is less important to know the absolute quantities of heat than their relative proportions. I need scarcely add, that I had a variety of those differential thermometers, of different sizes, and of some diversity of forms, adapted for particular occasions.'

We now proceed to relate the experiments.

The apparatus being in a close room without a fire, the canister was placed opposite to the reflector; and one of the balls of the thermometer (called, for the sake of distinction, the focal ball) was placed in the focus of the reflector. Almost immediately, the coloured liquor rose. When the blackened side of the canister was opposed to the reflector, the effect was denoted by 100 degrees; when a side covered with paper, by 98; when a side covered with crown glass, by 90.

Any one of these experiments, then, clearly manifests an accumulation of heat in the focus of the reflector; and, compared together, they indicate a slight alteration of effect attendant on the quality of the substance, of which the side of the heated canister is formed.—Present to the reflector the polished side, or any side covered with tin foil, and the liquor in the differential thermometer sinks to 12 degrees. Here, then, is a manifest difference of effect; and, without trespassing against the cautionary precepts of inductive philosophy, we may safely say

that the power of emitting heat, so as again to be concentrated, is materially different in glass and tin; and again, for the sake of convenience, glass, paper, or lamp-black, as producing nearly equal effects, may be put in the same class of substances that powerfully emit heat, which can be again concentrated.

If heat, however, can be concentrated at a certain point, is one substance more qualified than another to receive such heat?—Cover the focal ball with tin foil, present the blackened side of the canister to the reflector, and the effect is 20 degrees; present the bright side, and the effect is 2½: but the corresponding effects before were 100, and 12. Hence the power of tin to emit heat that can be concentrated, and to receive or absorb concentrated heat, is much inferior to the power of glass; and the two circumstances are concomitant, viz. the powers of emitting and absorbing heat.

If glass be conceived to *absorb* heat abundantly, then to be consistent, we must say that it reflects heat sparingly; and experiment shews that, if a glass reflector be substituted for the metal one, the effect on the thermometer is very small, and the same whether the back of the glass speculum be silvered or not, whether it be smooth or rough: but, if the front of the speculum be covered with tin foil, then the effect on the thermometer is increased ten-fold.

The human mind is so impatient during the interval which separates new and strange facts from acknowleged principles, that it soon forms for itself a mode of connection, and in some way unites effects with causes. To account for the curious facts which we have related, it might be suggested that heat is a subtle fluid, streaming like light from heated bodies, and permeating all substances. If this suggestion were well founded, thin screens between the reflector and canister would not materially alter the effect on the focal ball, and would produce the same alteration in all distances from the canister: but Mr. Leslie placed a screen of tin foil between the canister and reflector, and the effect on the focal ball was destroyed: he placed a screen of plate glass, and the effect was 20 degrees, at a certain distance, but less when the distance was increased; consequently, emitted heat does not permeate all bodies equally, nor similarly to light. If, instead of glass, a paper screen be used, the effect is 23°.

'What then (says Mr. L.) is this calorific and frigorific fluid after which we are enquiring? It is incapable of permeating solid substances. It cannot pass through tin, nor glass, nor paper. It is not light, it has no relation to æther, it bears no analogy to the fluids real or imaginary, of magnetism and electricity. But why have recourse to invisible agents?

——— Quod

——————— Quod petis, hic est.

It is merely the ambient AIR.

'But how shall we explain the diversified effects of different screens? By all of them, the current or pulsation of hot or cold air, in its progress towards the reflector, will be completely stopped: and, since the direct action of the canister is intercepted, the screen must operate by a secondary and derivative influence. From its position it acquires heat or cold, and, in its turn, displays the same energy as if it had formed the surface of a new canister of the corresponding temperature. It is no valid objection, that a substance so thin as paper, being incapable of containing much heat, is fitted only to produce a slight and fugitive effect. The screen is enabled to maintain its temperature, and consequently to continue its action, by the perpetual accessions of heat or cold which it receives from the canister.

'It hence appears, that the quantity of effect produced upon the focal ball when screens are interposed, is determined by the combined operation of two kindred properties; their aptitude to receive heat, and their power to discharge it. Thus, with paper the effect is greater than with glass; because, as was formerly ascertained, the receptive and the dispersive qualities of the former are likewise greater. With tin no perceptible impression is made, for those qualities it has in a very inferior degree; and though of each taken singly the action might be discerned, the effect of their combined influence is too minute to be observed with certainty.'

From the preceding statements, it is plain, we think, that these screens act merely as second canisters: but, to put the matter beyond all doubt, the author made the following extremely ingenious experiment:

'EXPERIMENT X.

'Select two panes of crown-glass as flat and smooth as possible, and coat one side of each with tin foil, by means of a little gum-water. Thus prepared, and the apparatus put in order, join those panes together with their tin surfaces in contact, and attach them to the frame of the screen; the focal ball will receive an impression equal to about 18 degrees. Invert the panes of glass, placing them with the tin coatings outmost: the liquor of the differential thermometer will now sink back again to the beginning of the scale.

'Such is the *experimentum crucis*. It establishes beautifully and, I think, beyond the power of contradiction, the simple theory to which we have been led by a close train of induction. In both cases the obstacle presented, or the compound screen, is absolutely the same. If the effects in the focus of the reflector were produced by some subtle emanation capable of permeating solid substances, how could such a singular contrast obtain? It seems impossible to elude the force of this argument; but in a subject so curious it may prove acceptable perhaps to relate a few more experiments, which tend at once to confirm and illustrate the same conclusion.'

As our limits do not suffer us to relate all these experiments, suffice it to say that they confirm the conclusion already deduced.

From

From the concentration and accumulation of heat, then, on the focal point of the reflector, and from the stoppage of heat by the interposition of screens, it seems that a flow of heated matter proceeds from the heated canister. Would such a flow, under such circumstances, take place in non-elastic fluids,—in water, for instance? The ensuing experiment gives a decisive answer to this question:

'Place the apparatus within a large tub, and secure each separate part in its proper position. Fill the tub with cold water, so as to cover the whole, except a funnel soldered to the mouth of the canister. Things being thus disposed, pour boiling water into the canister; and whatever surface fronts the reflector, the differential thermometer will not be at all affected.'

Thus, by a series of very interesting and skilfully conducted experiments, Mr. L. forces on the attention of the reader two very important facts; first, that, in air and elastic fluids, bodies discharge part of their heat with powers and energies that depend on the quality of the heated surface; and, secondly, that in non-elastic fluids, this peculiar mode of discharging heat does not take place. This property, or mode of discharging heat, then, seems intimately to depend on the elasticity of the medium through which it is conveyed; and therefore may not heat be conveyed by the pulsations of the elastic medium, and, when the medium is air, with the same velocity as sound?

Mr. Leslie supposes that heat is matter, a gaseous fluid of great tenuity, capable of chemically combining with the particles of other bodies. He shews, with great strength of argument, that it cannot be a mere effect produced by internal motion; and that, by mechanical addition, or simple aggregation, it could not effect those dilatations which it is found to produce. Again, he supposes that, as actual contact never takes place, the interval which separates the surface of a body from the medium in which it is placed is greater, or less, according as the chemical attraction between the particles of the body and the medium is less or greater. Hence the boundary between air and glass is less deep than the boundary between air and metal. Now, when the particles of air approach a heated surface, they receive a sudden accession of heat, and consequent expansion, which causes them quickly to recede from the heated surface, in the form of initial waves: the less, then, the interval between the particles of air and the surface, the more frequently will the contact be renewed, and the more quickly will one hot pulse follow another. Heat, therefore, will be propagated by means of a number of concentric spherical shells of air; consequently, the distance from the heated surface being increased, the intensity of the heat declines as the shell augments; and,

according to this doctrine, all heat in the same elastic medium will be transmitted with equal velocity, and the quantity conveyed will depend on the interval between consecutive pulses.

If the circumstance of the contiguity of the particles of air to those of the heated surface were the real cause of the difference in the quantity of emitted heat, then, if by any means the contiguity between the particles of air and of metal could be increased, more heat ought to be emitted; and such is the fact: for Mr. L. furrowed or striated the surface of the tin side of the canister, and the differential thermometer indicated an augmented effect. It is easy to see, by the help of a simple diagram, that the proximity of some of the particles of the heated metal is increased by this operation of furrowing.

A variety of experiments were made to ascertain the effect of substratums over the metal and glass sides of the canister. The thinnest metal covering over the glass side of the canister reduces the pulsatory power of that side to the power of a metal side: but the case is different when pellicles of isinglass are spred over a metal side: the pulsatory power increases with the thickness of the pellicle; and when the effect of the blackened side of the canister is reckoned 100 degrees, the effect of a thin coat of jelly applied to the bright metal side of the canister was 38 degrees, and that of a coat four times as thick, 54 degrees. To make experiments correlative to these, the surface of the tin reflector ought to be covered with thin pellicles of isinglass: for then, the recipient power of the reflector being augmented, its reflective power ought to be diminished; and experiments proved this to be the case: since the entire effect of the reflector, reckoned at 100 degrees, was thus regularly diminished:

Thickness of coating in parts of an inch,	Effect of Reflection.
$\frac{1}{20.000}$	77
$\frac{1}{10.000}$	49
$\frac{1}{5000}$	37
$\frac{1}{2000}$	27
$\frac{1}{1000}$	19

We have but slightly touched on a subject which, after all that has been said, is still pressed with many difficulties, namely, the materiality of heat. Those who discuss it should previously settle what is to be a test of materiality. If ponderability

derability be made an essential quality of matter, and if heat cannot be proved to possess weight, then heat is not material, according to the previous conditions: but the weight of heat is so small, that it defies the nicety of our balances to detect it; this may be true: yet it only requires us to admit the supposition of the possibility of its existence as a separate fluid: the thing is still to be proved. In fact, then, till heat can be weighed, or exhibited separately, when we say that heat is a gaseous fluid chemically combining with bodies, and producing, by the exertion of repellant forces, dilatation and expansion, we do little more than form for ourselves a mode of conceiving the production of certain effects; and we introduce an ideal agent, adapted and qualified to carry on operations of which our knowlege, to a certain degree, must be supposititious and conjectural.

If, however, we are averse to admit as a philosophical dogma the existence of the fluid matter of heat, yet, by conceiving such a fluid, we obtain the best mode of accounting for its phænomena; and the present author's explanation of the reflection of heat is very able. It does not radiate like light; nor does it propagate itself by its own individual vibrations: but it chemically combines with the particles of the elastic fluid, (be it air, atmospherical or hydrogenous,) and, by suddenly combining, it causes them as suddenly to dilate and recede, forming aerial pulses.

When the spherical aerial shells, charged with heat, come into contact with the reflector, part of the heat is absorbed by the latter; the quantity absorbed depending on the nature of that instrument: the rest, not separately, but combined with air, is reflected to the focus.

When light is reflected, the angles of Incidence and Reflection are equal; and if light be an impinging fluid, this exact equality of Incidence and Reflection may be explained by the amazing velocity with which light impinges. If the velocity were less, the equality of reflection would not take place; and heat, therefore, impinging only with the velocity with which sound is propagated, (1142 feet in a second) is imperfectly reflected. Consequently, there must be an abberration in its focus; and the experiments before us clearly shew that such is the fact.

Mr. L. indeed argues, and with his usual force, to prove that light and heat are the same fluid; that light, in fact, is heat in a state of combination with bodies, and that the chief distinction consists in the velocity with which the former is endued. Many circumstances are mentioned which render their identity probable: but there is one fact which, according

to the author, indisputably proves it: viz. 'If a body be exposed to the sun's rays, it will, in every possible case, be found to indicate a measure of heat exactly proportioned to the quantity of light which it has absorbed.' We do not find this fact firmly established: it is not proved by the photometer, for it is the assumed principle on which that instrument acts; besides, if it be true that the heat excited is in exact proportion to the light absorbed, is it a logical inference that light and heat are identical? If light be absorbed by bodies, does it not combine with them? If it combines with them, does it not lose its velocity, and become, according to the author's hypothesis, heat?—or will the act of rubbing two lumps of quartz together restore to the fluid its prodigious activity, and extrude it in the form of light? We state doubts rather than decided objections; for Mr. Leslie, by a variety of reasonings and illustrations, has rendered his position very artful and formidable. One of his proofs, however, seems to us not beyond the reach of controversy: If a plate of glass, he says, be placed between the sun's rays and a body, the temperature of the body is diminished, for instance, one-tenth: interpose a second plate, and the diminution of temperature is one-tenth of the remainder, and so on: but, if a plate of glass intercepts one-tenth of the sun's rays,—that is, of light,—is it a truth independent of experiment, that a similar plate will intercept one-tenth of the remainder?

Metal bodies conduct heat better, (that is, more quickly,) than earthen, or vitreous, or wooden bodies; and from this fact it has been inferred, (illogically indeed,) that heated metal bodies cool faster in air than vitreous bodies: but the curious experiments first related shew that the latter bodies emit a portion of heat, which can again be concentrated, more copiously than the former. There is, therefore, one cause why a vitreous ought to cool faster than a metal body. To guide us in these hazardous researches, let us again refer to experiment:

'In a close room without a fire, having placed a thin hollow globe of planished tin, four inches in diameter, and with a narrow neck, on a slender metal frame or stool, and resting against the sharp edge, I filled it with warm water, and inserted a thermometer. The air of the room was perfectly steady, and at the temperature of 15 degrees centigrade. I noticed carefully the progress of the ball in cooling: from the station of 35°, till the internal thermometer sunk to the middle point, or 25°, the time elapsed was 156 minutes. I next painted the surface of the ball with a coat of lamp-black, and again filling it with warm water, scrupulously repeated the experiment. The same effect was now produced, or one-half of the heat expended, in the space of only 81 minutes.'

From

From this experiment, it is clear that the addition of a coat of pigment accelerates the cooling of the metallic vessel. Are bodies cooled, then, solely by the pulsatory power with which they emit heat? If they are, the metallic body ought to cool eight times more slowly (since 8 nearly $= \frac{100}{12}$) than the painted one: but we may easily infer from the experiment that this is not the case; for, supposing the decrement of heat to vary in the compound ratio of the temperature and increment of the time, $dh \propto -h.\,dt$ (h heat, t the time,); and to obtain an equation, suppose the loss of heat in one minute at the initial act of cooling to be $\frac{H}{x}$ (H the whole heat at first); then, in x minutes, were the process of cooling uniform, $dh = -h.\,dt.\,\frac{1}{x}$: consequently, $\frac{t}{x} =$ hyp. log. $\frac{H}{h} =$ (if M the modulus be put $= .43429448$, &c.) $= \frac{1}{M}$ log. $\frac{H}{h}$; hence $x = t \times M.\,\frac{1}{\log.\,\frac{H}{h}}$. Let, now, h as in the experiment just quoted $= \frac{H}{2}$ $\therefore x = t.\,\frac{M}{\log.\,2} = t.\,\frac{434294}{301030}$: but, from the experiment, t for the vessel of planished tin $= 156$, for the vessel coated with pigment $= 81$; hence x in the first case $= 156.\,\frac{434294}{301030} = 225$ nearly; in the second case $x = 81 \times \frac{434294}{301030} = 117$ nearly; or, in other words, the metal surface must have lost every minute the 225th part of its heat, and the painted the 117th part. Consequently, vessels are cooled not solely by their pulsatory power of emitting heat; for, if they did cool solely by that power, when the painted surface lost the 117th part of its heat, the metal one ought to lose only the 936th part.

There are certainly some other causes, besides that of pulsatory energy, by which bodies lose their heat. If a hot body be immersed in water, it emits no heat by pulsation: but it rapidly cools; and with the same rapidity whether its sides be metallic or covered with pigment. If the air, then, were deprived of its elasticity, the process of cooling in it would be similar to that which takes place in water; and though the elasticity of the air may perhaps modify or interrupt this process, it cannot prevent it. Part of the fluid circumambient the heated body must become specifically lighter, and ascend. Again, particles of the fluid must come in contact with the heated surface, and, from an increased expansive force, recede

in curves convex to horizontal lines drawn from the respective points of contact. On both these accounts, motion must be produced in the ambient medium, and the heated surface must be visited by fresh portions of fluid: a question then arises, whether, and in what ratio, the renewal of fresh air accelerates the cooling of bodies? and, whether the renewal of the contact of fresh air impairs the pulsatory power of discharging heat? To determine the latter part of the question, the author, by means of a pair of bellows, impelled a current of air along the heated side of the canister when opposed to the reflector, and no effect was produced on the differential thermometer; that is, the ascended liquor remained at the same height:—to determine the first part of the question, heated balls were exposed to the action of the wind, and the greater the wind, the greater was the rate of cooling. It is plain, therefore, that the renewal of the contact of fresh air accelerates the cooling of a body; and it may easily be shewn that the effect of such a renewal is the same, whatever be the nature of the heated surface. Thus, in a preceding page, we have denoted by x the time required for the cooling of a body, if the process of cooling were uniform. Expose now two equal and similar balls, one metallic, the other covered with pigment, to be cooled in a close room; and from the observed times in which they lose half their heat, calculate x: suppose x for the metallic ball to be a; for the painted b. Again, expose the same balls to the action of a current of air, mark the times, and calculate as before x: suppose now, x for the metallic ball to be a', for the painted b'; then the difference in the rate of cooling, produced by the action of the current of wind, for the metallic ball $= \frac{1}{a} - \frac{1}{a'}$ and for the painted ball $= \frac{1}{b} - \frac{1}{b'}$. Now in low temperatures, that is, for instance, when the temperature of the heated ball above the surrounding atmosphere is about 20°, experiment proves that $\frac{1}{a} - \frac{1}{a'}$ nearly equals $\frac{1}{b} - \frac{1}{b'}$; and more nearly, the stronger is the current of air to which the balls are exposed. Hence it is inferred that the effect of a current of wind is the same, whatever be the nature of the heated surface.

The above values of x (*viz.* a, b, a', b',) are not accurate: since they are calculated from the formula $dh = \frac{-h.dt}{x}$ which in high temperatures is not true.

The formula, $dh = \frac{-h.dt}{x}$, is deduced from this principle

that

that the decrement of heat is proportional to the difference of temperature of the conterminous surfaces. If the principle be true, then, the same value of x ought to result, from whatever temperature and observed time it is calculated. Now let the difference of temperature be 20°: in 156 minutes, half the heat in the metal ball is expended, and in 81 minutes half the heat in the painted ball; consequently, for the metallic ball $x = \frac{t}{\text{hyp. log. } 2} = 225$, and for the painted, $= 117$.

Again, let the difference of temperature between the same balls and the air of the room be 80 degrees: in 15.5 minutes, the metallic ball loses 10 degrees of heat; in 10.5 minutes, the painted loses 10 degrees; consequently, for the metallic ball $x = \frac{15.5}{\text{hyp.log. } \frac{80}{70}} = 15.5 \cdot \frac{43429 \text{ \&c.}}{\log. 80 - \log. 70} = 116$; for the painted ball, $x = \frac{10.5}{\text{hyp.log. } \frac{80}{70}} = 10.5 \cdot \frac{43429 \text{ \&c.}}{\log. 80 - \log. 70.} = 79$; which numbers (116, 79) are widely different from 225 and 117. Therefore the principle that the loss of heat is as the difference of temperature of the conterminous surfaces is not true, and the formula $dh = \frac{-h\,dt}{x}$ cannot be applied in all temperatures. The process of refrigeration is evidently accelerated in the higher temperatures. —— It has been already shewn that the powers of dissipating heat by pulsation in painted and metallic surfaces are as 8 to 1: let P, therefore, denote that power in metal, $8P$ denotes the power for a painted surface: but, between the temperatures of 20 and 10, the rates of cooling are as $\frac{1}{225}$ and $\frac{1}{117}$: hence $8P - P$ or $7P = \frac{1}{117} - \frac{1}{225} = \frac{108}{117.225} = \frac{9.12}{117.25.9} = \frac{12}{2925}$: consequently $P = \frac{1}{1706}$ nearly, and $8P = \frac{8}{1706}$. Hence, if we subtract from the rate of cooling what is due to the pulsatory power, we shall have a remainder denoting an effect belonging to some other cause of refrigeration: which effect therefore $= \frac{1}{225} - \frac{1}{1706} = \frac{1}{260}$ nearly. By a similar process, between the temperatures of 80 and 70, the effect belonging to a cause of refrigeration, hitherto not assigned, $= \frac{1}{125}$. Mr. Leslie ascribes this refrigeration, which is independent of the pulsatory energy, to the *repeated contact of air.*

No doubt, the repeated contact of air, without impairing the pulsatory energy, accelerates the process of cooling; and it is important to know the exact effect produced by a stream of air From experiments very ingeniously instituted, Mr. Leslie determined that the refrigerant power of a stream of air varies as its velocity *. Hence, as, in the act of cooling, motion must be produced in the ambient medium, the rate of cooling will depend on the celerity of that motion; or on the celerity with which the contact of the heated surface with fresh particles of air is renewed.

The explanation of the additional causes of refrigeration, besides that of pulsation, given by the author, is not, in our opinion, very perspicuous and satisfactory. He supposes that a slow recession of heated particles takes place, in lines perpendicular to the heated surface, and that the velocity of recession varies as the excess of temperature: for, since the square of the velocity varies as the space multiplied into the force, and

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* When the velocity $=\frac{20}{3}$ feet in a second, the rate of cooling was found $=\frac{1}{120}$. Let v denote increase of velocity above $\frac{20}{3}$ in a second, (Mr. L. seems to us to have made a mistake in calling v the velocity) then $\frac{20}{3} : 6\frac{2}{3}+v :: \frac{1}{120} : \frac{6\frac{2}{3}+v}{800}$, the rate of cooling belonging to the velocity $6\frac{2}{3}+v$. On this principle, Mr. L. constructs an Anemometer, the account of which is subjoined:

'From the same principle we derive the construction of a new and very simple kind of *anemometer*. It is in reality nothing more than a thermometer, only with its bulb larger than usual. Holding it in the open still air, the temperature is marked: it is then warmed by the application of the hand, and the time is noted which it takes to sink back to the middle point. This I shall term the fundamental measure of cooling. The same observation is made on exposing the bulb to the impression of the wind, and I shall call the time required for the bisection of the interval of temperatures, the occasional measure of cooling. After these preliminaries, we have the following easy rule: —*Divide the fundamental by the occasional measure of cooling, and the excess of the quotient above unit being multiplied by* $4\frac{1}{2}$, *will express the velocity of the wind in miles* per *hour*. The bulb of the thermometer ought to be more than half an inch in diameter, and may, for the sake of portability, be filled with alcohol, tinged, as usual, with archil. To simplify the observation, a sliding scale of equal parts may be applied to the tube. When the bulb has acquired the due temperature, the zero of the slide is set opposite to the limit of the coloured liquor in the stem; and, after having been heated, it again stands at 20° in its descent, the time which it thence takes until it sinks to 10° is measured by a stop-watch. Extemporaneous calculation may be avoided, by having a table engraved upon the scale for the series of occasional intervals of cooling.'

the

the force is measured by the space through which the heated particles recede, $(vel^y)^2 \propto (space)^2$ or $(force)^2$, and $vel^y \propto$ expansive force, or as the excess of temperature. These heated particles, in receding, communicate their heat to the surrounding fluid; their place is supplied by fresh particles; and thus, by the renewal of contact, the refrigerating effect is accelerated. On a subject so intricate, and so liable to objection, it is right to quote the author's own words:

'Each portion of air or gaseous fluid which touches a hot surface must receive that same measure of heat and a corresponding increase of elasticity. It, consequently, dilates with a force proportional to the space through which it recedes, or to the elevation of temperature which it has assumed. But the square of the acquired velocity, as we formerly remarked, is compounded of the space and the actuating force: in the present case, it is, therefore, as the square of either of these elements, or as the square of the degree of heat which is absorbed. The velocity of propulsion is hence proportional simply to the excess of temperature. The time of action is always evidently the same, because, if the space be enlarged, the rate of dilatation is likewise increased; and hence, from every exciting point of the hot surface, a slender continued stream of air is emitted perpendicularly, whose velocity is proportioned to the measure of heat incessantly communicated. When the process is inverted, and the surface affected is colder than the surrounding atmosphere, the contiguous portions suffer contraction and a diminution of their elasticity, which occasions a gentle perpendicular flow directed towards its source, and productive of a similar though an opposite effect.

'Thus the discharge of heat from a body is materially promoted by the soft propellent motion excited continually at its surface. This efflux extends to a very short distance, before it spends its force and loses itself in the atmosphere; yet it equally produces the refrigerating effect, by quickening the circulation and fresh contact of the ambient medium. Though it conspires with pulsation to accelerate the dispersion of heat, it differs essentially in its character from that species of energy. Pulsation is the same at all degrees of heat, and its intensity depends merely on the nature of the bounding surface: but the perpendicular flow is more vigorous in proportion to the excess of temperature, and has no relation whatever to the qualities, physical or mechanical, of that surface. It was shown that only a very few particles disseminated in the contiguous shell of air, feel at once the pulsatory influence: the other particles, which constitute the general mass, probably imbibe their share of heat, and passively obey the impression of their augmented elasticity.'

To determine the law of the rate of cooling with regard to the temperature, recourse must be had to experiment; and Mr. Leslie, by repeated trials, found that at the temperatures 10°, 40°, 70°, the rates of cooling for a metallic surface were 2, 3, 4; and for a painted surface, 4, 5, 6. Consequently, if we increase the temperature by 30°, we increase the rate of cooling by 1,

by 1, the pulsatory energy remaining the same. Hence, denoting by P the pulsatory energy, and by an unknown quantity x some unknown refrigerating cause, independent of the nature of the heated surface, we have $\begin{matrix} 8P + x = 4 \\ P + x = 2 \end{matrix}$ temperature being 10°. Consequently, $P = \frac{2}{7}$, and $x = 2 - \frac{2}{7} = 1\frac{5}{7}$, which two numbers $\frac{2}{7}$, $1\frac{5}{7}$, therefore solely denote two effects, or losses of heat; one due to pulsation, a known cause, the other to causes not yet investigated. Suppose, now, the effect $1\frac{5}{7}$ to be due to two causes y, z, one of which (y) varies as the excess of temperature; then, since at 30 the value of $y = 1$, at 10 it $= \frac{1}{3}$. Consequently, $1\frac{5}{7} = \frac{1}{3} + z$, or $z = 1\frac{8}{21}$, the measure of a third unknown refrigerating cause. We have stated this reasoning in the above cautious terms, because we are aware that,—if a person denies that besides pulsation a second refrigerating cause, varying as the temperature, and expounded in its operation by the perpendicular recession of heated particles, can be distinctly ascertained,—proofs sufficiently satisfactory cannot be collected from Mr. L.'s reasoning, to convince him of the contrary: indeed, we think that this is an assailable part of the author's doctrine. It is difficult to conceive how the heated surface can at once cause some particles to recede, forming pulses, and others to recede in lines perpendicular to the surface; and these latter particles, in consequence of their recession from an expansive force and increased rarity, must describe curve lines concave to a horizontal plane drawn above the heated body. In our opinion, Mr. L. too much neglects the dissipation of heat as proceeding from the ascent of the heated particles.

The third cause of refrigeration, viz. z, whose effect we have deduced to be $1\frac{8}{21}$, the author thus assigns:

'The portion of heat thus consumed is most certainly not annihilated; neither is it transported to a distance, by any species of elastic motion excited in the encircling fluid. It is, therefore, absorbed by the contiguous shell of matter, and afterwards slowly diffused through the extended mass. Air is still the sole medium by which heat endeavours to maintain the balance among remote or detached bodies; but here its operation is of a passive nature, and it receives and conveys the calorific impressions through its substance in the same manner as a bar of iron or any solid material.

'This completes the analysis of the refrigerating action of air. There are four distinct modes in which it produces the effect: three of these are always conjoined, and the fourth only throws in its occasional influence. They all conspire to the same end, but their relative shares of operation are various and mutable. One scource of communication depends on the quality of the heated surface, another on its elevation of temperature, a third on the permanent conducting disposition of the air, and the last arises from the celerity of impulse by which

which that active fluid may chance to be affected. The continual ascent of the hot, and consequently rarefied, air, must contribute in some degree, though indirectly, to accelerate the effect; for it is evident, that the stagnation of a warm encircling atmosphere would debilitate the operation of the combined refrigerating causes.'

We have already noticed that the theoretical results from such a formula as $dh = -h.dt$ are not confirmed by experiments. According to Mr. Leslie, the true formula is $dh = -(a+h)\ h.dt$, h excess of temperature, t time, a a constant quantity; and the following is his method of obtaining this formula. At the equidistant temperatures of 10°, 40°, 70°, in a variety of experiments, he says, he found the *rates* of cooling for a metallic surface to be, 2, 3, 4, and for a painted surface, 4, 5, 6: hence, to find the relation connecting the rates of cooling with the temperature, suppose v to be a quantity to be investigated; then, when the temperature is 10 and 40°, $v+10 : v+40 :: 2 : 3$; consequently $v = 50$;—and for a painted surface $v+10 : v+40 :: 4 : 5$; consequently $v = 110$. Hence the rates of cooling, corresponding to any other temperature h, are for a metallic and painted surface respectively $50+h$, and $110+h$; and according to Mr. L. these quantities represent the combined action of three refrigerating causes, viz. the reiteration of aerial contact, pulsation, and the diffusive absorption of the atmospheric mass. Moreover, these three causes are, he says, always inseparably conjoined. Now the decrement of heat must vary in a ratio compounded of the refrigerating causes, and the increment of the time; or, in Mr. L.'s own words, in a ratio compounded of *the refrigerating energy* $(a+h)$ and the *intensity of impression* (h): therefore $dh = -(a+h)\ h.dt$ (a denoting indifferently either 50 or 110).

Now to this theory and connected formula we have some objections: or rather we would merely state them as doubts, since we are aware that the author, *quite at home* with his own theory, may possibly have unwaringly omitted some circumstances of explanation that are essential to his readers. He says that the rates of cooling are as 2, 3, 4; now how are these *rates* calculated? They vary inversely as the ranges; and if they are calculated from such an expression as $dh = \frac{-h.dt}{x}$, they are calculated from a particular and imperfect hypothesis. If the expression ~~dn~~ $dh = -(a+h)\ h.dt$ be correct, the true ranges and rates ought to be deduced from it: or does Mr. L. mean, on a particular hypothesis, to calculate one of the elements of the refrigerating process, and to apply that element, so calculated, in the general and true theory?

By intensity of impression, which varies as h, we suppose that the author means the refrigerating cause which arises from the

the perpendicular recession of the expanded particles from the heated surface: but he should have explained this phrase.

The differential expression, from which the loss of heat is to be calculated, is $dh = -(a+h)\,h.dt$; consequently $dt = -\frac{dh}{h(a+h)} = \frac{1}{a}\left\{\frac{dh}{a+h} - \frac{dh}{h}\right\}$, and integrating $t = \frac{1}{a}$ hyp. log. $\left(\frac{a+h}{h}\right)$ + Corr^n = (if H be initial heat) $\frac{1}{a}\left\{\text{h. l. }\left(\frac{a+h}{a+H}\right)\right.$ $\left. - \text{h.l.}\frac{h}{H}\right\} = \frac{1}{Ma}\left\{.\log.\left(\frac{a+h}{a+H}\right) - \log.\frac{h}{H}\right\}$, if $M = .43429$ &c.

From this formula, Mr. L. calculates the progressive cooling of a hollow tin ball, six inches in diameter, filled with boiling water: but the table, as it appears to us, merely gives the proportional time; thus making $a=50$, $H=100$, $h=98$, we have $t = \frac{1}{Ma}.0029443 = \frac{2.9443}{1000\,Ma}$. If $h=50$, $t = \frac{1}{Ma}.1249387 = \frac{124.9387}{1000\,Ma}$; the proportion between which times agrees with that of Mr. Leslie: but, to know the actual time, we must learn from experiment the observed time corresponding to the loss of a certain portion of heat, 1 degree for instance; and we are surprised that the author should not have put his theory to the test, by comparing the times resulting from the preceding formula with observed times.

By an application of the above form, Mr. L, calculates the range, and consequently determines the portion of heat spent in each particle of time. For a tin ball, it $= \frac{50+h}{50}\left(\frac{1}{1000\,M}\right)$; for a painted ball, $\frac{110+h}{50}\left(\frac{1}{1000\,M}\right)$. In each expression, $\frac{h}{50}\cdot\frac{1}{1000\,M}$ measures the effect of the slow perpendicular force excited in the contiguous atmosphere; and $\frac{1}{1000\,M}$ and $\frac{11}{5}\,\frac{1}{1000\,M}$, represent the effects of the other causes of refrigeration, differing in the metallic and painted ball, on account of the inequality of their pulsatory energies. Hence $8P - P$ or $7P = \frac{6}{5.1000\,M}$; and $P = \frac{6}{35.1000\,M}$. Again, at an equilibrium of temperature between the conterminous surfaces, $h=o$; and the portion of heat spent (calculating by the formula) $= \frac{50}{50.1000\,M}$; hence $\frac{50}{50.1000\,M}\,\frac{6}{35.1000M} = \frac{29}{35.1000\,M}$ measures the quantity of heat conducted away through the stationary mass of the surrounding air. Therefore, says Mr. L., from a hollow

hollow sphere 6 inches in diameter, filled with boiling water, the portions of heat discharged every minute are thus represented:

By abduction, the 524,1485th,
By recession, the $h \times 21714.725$th, and
By pulsation, the 2533.385th for metallic,
and the 316.673d for the surface of paper.

This is, we trust, a faithful account of Mr. L.'s analysis of the process of the cooling of heated vessels in atsmospheric air:—the real cause of the difference in the rates of cooling is pulsation.—The author then applies his theory of the process of cooling to explain an anomaly that shewed itself in one of his experiments; viz. when the painted surface of the canister was turned towards the reflector, and the bulb of the thermometer was covered with tin foil, the effect indicated was 22 degrees: when the metal surface was used, and the bulb was covered, the effect indicated was only 12 degrees: the procedure then being inverted, the same effects did not take place. The cause is thus assigned: the metallic bulb cools slower than the glass, and consequently is *proportionally* more affected by the same impression of heat.

Here our limits oblige us to pause: but we hope to resume this report in our next Number.

[*To be continued.*] R.W.

MONTHLY CATALOGUE,

For SEPTEMBER, 1804.

POETRY.

Art. 12. *Syr Reginalde;* or the Black Tower; a Romance of the 12th Century. With Tales and other Poems. By Edward Wedlake Brayley and William Herbert. Crown 8vo. pp. 170. 5s. Boards. Vernor and Hood.

THE modest apology which is offered by the joint authors of this volume, for any defects in their performances, is adapted to conciliate the severest critic. The productions, themselves, however, with all their "imperfections on their head," plead too forcibly for favour and indulgence to admit of much severity on our part; and though they certainly are not so correct in many respects as the laws of poetry and metre require, they exhibit many tokens of genius and talents, which, under due care and cultivation, may in time attain a sterling value. The story of the Devil and the Lawyer is more droll than poetical, and we extract a part of it to amuse the reader:

'A rogue of a Lawyer rode out one day;
O'er a desolate heath he gallop'd away:
The wind chilly blew, and the rain fell fast,
And the Lawyer shook at the sound of the blast.

'In

'In the midst of the heath stood an old oak tree,
And the form of its branches was lovely to see;
And this beautiful oak as the Lawyer rode under,
Was sever'd in twain by the loud-rolling thunder.

'More cold blew the wind—more fell howl'd the blast,
The Lawyer thought ev'ry moment his last;
When, to add to his fear, he espied on the road,
A monstrous, and ugly, black, venomous toad.

'The blood of the Lawyer was chill'd at the sight,
And even his horse started back with affright;
For most foul was the toad, most enormous its size,
And the living fire seem'd to flash from its eyes.

'The Lawyer could hardly keep firm on his seat,
His pulse for an instant neglected to beat;—
When, raising his hand, he his whip gave a smack,
And the monster, so venomous, struck on the back.

'But, alas! how his frame shook with agoniz'd wonder,
As the reptile's dark skin he saw parting asunder,
And beheld on his haunches the AUTHOR OF EVIL!
"As I live," cried the wretch, "'tis *Old Nick!* 'tis the *Devil.*"

'The Devil leap'd up with a horrible cry,
And his stature was quickly eleven feet high!—
His forehead and cheeks were glowing with flame,
And he seem'd to rejoice at the sound of his name.

'O'er his shoulders a quiver of arrows was thrown,
In his right claw he grasp'd a huge marrow-bone;—
In his left, a large roll of sulphur burnt blue,
For pastime to smoke when he'd nought else to do.

'The Lawyer, with fear grew as pale as a corse,
And thrilling with dread, turn'd the head of his horse;
Then back o'er the heath flew as swift as the wind,
In hopes to leave hell's grimly monarch behind.

'More cold blew the wind,—more fell howl'd the blast,
The Lawyer thought every moment his last;
Every tooth in his head chatter'd quick with his fears,
For the cry of the Devil still rung in his ears.'

'So the Devil flew away with the Lawyer's soul'

is a line on which no comment is required, if it be meant for plain prose. More experience will, we doubt not, teach the authors to correct these faults; and we had rather see tokens of genius accompanied with blemishes, than mediocrity with dull correctness. Man.

Art. 13. *Poems on several Occasions.* By Charles Crawford, Esq. Crown 8vo. 2 Vols. 7s. Boards. Becket.

The first of these volumes is occupied by a poem in six books, intitled The Christian: the second contains—Richmond-Hill—The

Dying Prostitute—Augusta and Sophronia—The Forsaken Maid—Ode on Spring—On Adversity—Verses on the Recovery of a young Lady from Sickness—The Jasmin—Epitaph—Lines on the Death of John Wesley—Imitation of a Passage in Job—The Oak—Paraphrase of the Sermon on the Mount—The Restoration of Jerusalem. In proportion to our approbation of the virtuous and amiable tendency of Mr. Crawford's writings, must be our regret on being restrained by the laws of our Court from paying any high compliments to his Muse: but, as we have remarked, till we are ourselves disgusted with the repetition, good meaning is not a sufficient atonement for bad poetry, when a man professedly undertakes to delight us with the charms of verse. The subject of the first poem is capable of the richest embellishment, or rather is a theme which furnishes the richest and noblest thoughts: to discuss it, then, in tame numbers, must disappoint; and what other character do the following lines exhibit?

'In pain and danger hence undaunted be,
And tread upon the Roman constancy:
And be than all their vaunted heroes more,
Above their history, their fable soar.'

Mr. C. is little attentive to the *lucidus ordo*; for, in the formation of his lines, words are greatly transposed. Thus,

'Castalia, sweeter than, O Thames, flow thine.'

'Oft has my mind deprest new vigor found,
As if the Muse her inspiration *round*,
As on a fav'rite hallow'd mount had thrown
Enamour'd, and had made it all her own.'

The man of taste will be able to appreciate Mr. C's poetical merit from the *Ode to Adversity*, which we shall transcribe entire.

'O thou dread pow'r, whose ruthless sway,
The gen'ral race of men obey!
Full many a keen vindictive dart
Of thine, has pierc'd my lab'ring heart;
Which my faults urg'd, or others' spite
To point has ta'en unkind delight.
Yet many of thy stings and scorn,
Right manfully for years I've borne.
O grant that I henceforth may know,
For oft these gifts thou deign'st bestow,
A feeling yet a patient mind,
Which is delib'rate and resign'd;
Which keeps a firm and equal state,
Though tender not effeminate;
That always for another's woe,
The tear of Sympathy may flow;
But let me weakly ne'er lament,
With heart-corroding Discontent,
The heav'n-appointed cares of man,
Which is as impious as 'tis *vain*.
Yet when I feel the chast'ning rod,
Of my Friend, Father, and my God,

Let

Let me dejected in the dust,
Confess the punishment is just,
And may it happily improve
My filial reverence and love.
Thus Hope from Piety that's bred,
Shall rise upon thy *foot-stool head*,
Above this vale of tears aspire,
Like great Elijah in his car of fire,
And in exultant joy be driv'n,
To all the deathless bliss of heav'n.'

We do not see the propriety of calling these lines an ode, any more than we can find a rhime in *man* and *vain*; or can comprehend what is meant by the head of a foot-stool. Mo.y.

Art. 14. *The Judge;* or an Estimate of the Importance of the Judicial Character, occasioned by the Death of the late Lord Clare, Lord Chancellor of Ireland. A Poem, in Three Cantos. By the Rev. Jerome Alley, Chaplain to the Right Honourable Lord Sheffield, &c. Crown 8vo. 4s. 6d. Boards. Vernor and Hood.

In the description of an upright and impartial Judge, this author makes many pertinent reflections on the duties which belong to that venerable character, when it is supported with ability and integrity; and in the course of the poem several handsome compliments are paid to the memory of the late Lord Chancellor Clare of Ireland, whom the poet represents as an illustrious example of the virtues which he describes. While the author passes this encomium on the exalted virtues of that nobleman, he takes occasion to point out defects which degrade the sacred office of a Judge, and, although but rarely, stain the annals of our history. By means of this contrast, the meritorious pattern of Lord Clare is rendered still more conspicuous, and his memory shines with redoubled lustre.

With regard to the composition of this poem, we shall endeavour to imitate the example represented in it, and to administer impartial justice from our "awful Bench."—Passages may be selected from different parts of the composition, which, taken separately, will please and be approved: but, as a *whole*, it is not calculated to excite any great degree of admiration. It wants force and animation to rouse and attract the reader's attention; and, in the use of figurative language, the metaphor is overstrained, and loses its beauty and effect. For instance, (p. 36,) in describing the grave as uttering the voice of admonition, the author compares it to the Athenian Lyceum, and every bone is said to be an Aristotle philosophizing to mankind.

'Yet that earth,
Fresh from the delving spade, might well awake
Far different thought. It is a volume, rich
In precious wisdom; a Lycæan school,
Where every bone becomes a Stagyrite,
Skill'd in such inference, as should make the heart
Of each poor frail one quake.'

This is a laughable *conceit*. The figure was *bold enough*, when the comparison was between the grave and a volume of precious wisdom! There the author should have stopped.—Again, at p. 45, the figure prosopopœia, which has a very happy effect in poetry when temperately employed, is carried to such length that almost every noun for two pages is brought on the stage of human life, and made to act a part in this crowded *Phantasmagoria*. Again, when the author in his zealous affection for the character which he describes, (p. 19.) speaks of the virtuous Judge whom 'he venerates as a God,' how can we acquit the reverend Divine, at our tribunal, of the charge of idolatry?

To shew that there are other passages, which deserve commendation, we make one short extract, describing the character of a good landlord:

'For he felt,
As man, for man; he watch'd, with anxious eye,
The humblest cottage right; and—not like those,
Who o'er their lands with tyrant folly rule,
Till, a whole province ruin'd, they remain
The living pyramids of unpeopled wilds!
He lov'd the little hamlet; lov'd and sooth'd
The toiling tenant, and gave *Hope to twine*
The *peasant's sickle with her fairy flowers*.
Hence, o'er his grounds, no sorrowing vassal sigh'd,
Pampering a despot's ear! no wretched race
Of starving slaves proclaim'd the landlord's guilt.
Peace, and her sister Plenty, led the flocks
That o'er his pastures stray'd; or held the plough
That furrow'd his rich glebe.'

Here the personification adds to the beauty of the image, and the office of Hope is peculiarly poetical.—We shall only add that several sensible notes accompany the poem; and we particularly approve of one, in which the author speaks the sentiments of a true Englishman respecting *Patriotism*, and pays in the meantime a grateful tribute to his patron Lord Sheffield.

Man^{s}.

Art. 15. *The Lewes Library Society*; a Poem. By John Button, jun. of the Classical and Commercial Academy, Cliff, Lewes, 4to. 3s. Button and Co. &c.

We need not descant on Library-Societies as being the most cheap, useful, and amusing institutions which can be established in country towns. They afford not only a permanent but a growing fund of instruction, and must obtain the good wishes, if not the actual patronage, of all those who are friends to the diffusion of knowlege. As we rank ourselves in this class, we perused with satisfaction the account of the establishment and progress of the Library-Society at Lewes; and, from Mr. Button's well-written preface, we conceived hopes of finding a laudable institution embellished and recommended by the fascinating attractions of the Muse. Having also mentioned friends who had perused his Poem with a critical eye, and who had favored him with their suggestions, we were prepared (though these suggestions might not have been implicitly adopted) for that dish of

literary luxury, a correct and polished Poem. Alas!—but let us not 'damp the gen'rous ardour of the bard', if we attempt to convince him that he would have pleased a greater number of readers, and have incurred no danger of 'losing his ass,' (to use his own comparison,) had the hints of his critical friends been more regarded.

Poetry has the property of elevating its subject: how Mr. Button has succeeded in this respect, let his view of the Lewes book-society declare:

'Doctors their drugs forsake, and swains their fields,
To cull the choicer fruits which science yields:
Grocers neglect their sugar and bohea,
And e'en attornies here forget their fee.'

The account of the ballotting for members is not more happy: but when Mr. B. proceeds to detail the contents of the library, he makes some little amends in describing the Encyclopædia, by his translation of the motto from Lucretius:

Floriferis ut apes in saltibus omnia libant,
Omnia nos——

'And, as the bee from ev'ry flow'r that blows,
The nettle blossom, or the fragrant rose,
With small proboscis sucks the honied sweet,
And humming bears it to his thatch'd retreat,
They from each book the worthier part compress'd,
Revive the ancient, and the crude digest;
Lop the redundant, the defects supply,
And wand'ring phrases bind in closer tie.'

As a grammarian, how could Mr. Button suffer the following couplet to stand?

'But far the most from Lewes' pop'lous site
Her sons repair, and in the cause unite.'

'August *ripes* the ear' is not now admissible, for we must distinguish the verb to *ripen* from the adjective *ripe;* and 'rouses rage' is a vulgar alliteration, which should be avoided in poetry.

For the sake of a word to make out his rhime, Mr. B. has stocked Lewes with men of philosophic genius:

'To suit the various genius of the throng,
These shelves to mild philosophy belong.'

Perhaps Mr. Belsham's History of the present reign may stand in the library by the side of Lord Littleton's History of Henry II.: but what reason can there be for joining them together in the same couplet? What a chronological jump backward from the first to the second line!

'And ample scope to BELSHAM'S pen affords:
The second HENRY'S LITTLETON records.'

After having celebrated the praise of Dr. Johnson, Mr. B. subjoins this *set-off:*

'Here would I close—but Truth forbids the pause,
And blame is mingled with the warm applause;

His

His rankling bosom prejudice distain'd,
And Scotsmen scorn the breast where envy reign'd.'

The last line should have contained a proof of the Doctor's prejudice and illiberality, of which his visit to Scotland furnishes many instances: but, instead of confirming his assertion respecting Dr. Johnson, Mr B. only tells us,—which indeed is nothing to the purpose, that 'Scotsmen scorn the envious.'

These strictures may suffice to shew Mr. B. that his poem is capable of improvement. Mo.y.

Art 16. *Our Country*. A Poem. 8vo. 1s. Hatchard. 1804.

By such a subject as that which this poet has chosen, we are disarmed of all the feelings that are supposed to belong to our censorial office, and are induced to welcome the writer with the most perfect good nature: '*Cari sunt parentes, cari liberi, propinqui, familiares: sed omnis omnium caritatis patria una complexa est.*' He who is not now alive to this noble sentiment of Cicero is altogether unworthy of the privileges and blessings resulting from the British Constitution. To the poet before us, no reproach of this kind belongs. His patriotism burns with a noble brightness; and he has endeavoured, by the effusions of his Muse, to inspire every Briton with reflections and sentiments suitable to the present state and exigencies of our Country. Writing from the heart, and with a true zeal in the important cause in which we are now embarked, his numbers are not destitute of force; and if we occasionally encounter a weak line or a bad rhime, we are made amends by the spirit and animation thrown over the whole. e/

The consequences which would result from the triumphs of the enemy are detailed in such a manner as to awaken our liveliest sensibilities, and to fix in the bosom of every Briton, if it were not fixed already, the determined resolution of conquering or perishing in the conflict; the determined resolution of not surviving the independence of his country. When France threatens to invade such a land as ours; to blot us from the list of Nations; to deprive us of all that gives dignity to the social state, and renders life valuable; there can be but one sentiment pervading the community;—the citizen hastens to share each danger of the soldier, and prefers death to that scene of horror which must result from pusillanimity.

The ardor evinced by the volunteers, so honorable and so necessary on the present occasion, is thus described by the poet:

'But hark! what notes of glory strike my ear,
Fly through the skies, and cleave the trembling air!
To arms! to arms! ten thousand trumpets sound;
To arms! to arms! the echoing hills rebound:
A million heroes to their banners fly,
Resolv'd to conquer, or prepar'd to die:
High swell their breasts, high beat their generous hearts!
From their bright eyes indignant lustre darts!
Hark, with exulting shouts the valleys ring!
"Conquest or Death, our Country and our King!"
'Twas thus when Xerxes, glorying in his host,

Pour'd the vain threat, and gave the futile boast;
The sons of Freedom rose in arms sublime,
And chas'd the vaunting tyrant from the clime.
Proceed, illustrious band! the world's applause
Promotes your vigour, and attends your cause.
Proceed and conquer. Though unus'd to wield
The massy sword, and tread th' embattled field;
Yet in your breasts a generous courage glows,
Superior far to what a *foeman* knows.
No thirst for rapine, and no vain desire
Of false renown, your ardent souls inspire:
No! more enlighten'd, more exalted meeds,
Impel you forward to immortal deeds!
Ye go to save your King, your native land,
Your wives, your children, from a treacherous band.
Ye go your holy altars to defend,
From those who know no God, before no altars bend;
Hypocrisy's thin veil to pluck away,
T' expose a monster to the light of day.
Ye go to check profane Ambition's car,
To stay the horrors of incessant war.
Ye go the nations of the earth to bless
With peace, with freedom, and with happiness.
These are indeed our sons! your sires would say,
Could they revive, and view this glorious day.
And late posterity your praise will sing;
'Twas thus, they'll cry, when virtuous George was King,
Our fathers arm'd, and glorying in their cause,
Preserv'd the throne, their liberty, and laws.
While through their veins a patriot rapture rolls,
Beams in their eyes, and elevates their souls;
They'll teach their sons to imitate your deed:
For British laws to fight, for British freedom bleed.'

Though the author sounds the trumpet of war, he is no ferocious spirit: with patriotic courage he wishes to combine humanity: and he urges us to shew mercy to the vanquished and captive foe. Moy.

Art. 17. *Æsop's Fables*, new versified, from the best English Editions. In Three Parts. By H. Steers, Gent. 8vo. pp. 213. 4s. sewed. Harris, &c.

This version is intitled to approbation for the easy and familiar style, in which it is written, though sometimes the rhymes are not so correct as might be wished. The moral of the fable is in general well conducted, and affords either instruction or diversion, and frequently the union of both. We give as a specimen the application of the fable of 'The Mountains in Labour,' as appropriate to our situation and influence with authors.—

'Seek you to wield the epic pen,
And paint the feats of mighty men;
Take Homer for your constant guide.
Achilles must be drawn with pride,

Inexorable

Inexorable in his rage,
With valour that might hosts engage:
Ajax of brutal strength be found,
Dealing destruction all around:
Nestor, and wise Ulysses, join'd,
Whose councils sway the regal mind,
In eloquence must still be seen:
Thersites only, base and mean.
In history would you excel,
Great Ammon's worth and Cæsar's tell,
From Livy, Plutarch, take your rules;
Or should you from the modern schools,
Of warlike chiefs, your trophies raise,
Cornwallis, Sidney *, claim your praise:
Mourn Riou's lot, and drop the tear
O'er gallant Abercromby's bier.'

The volume is dedicated to the Earl of Carlisle. Man.s

Art. 18. *Great Cry and Little Wool;* or the Squads in an Uproar; or the Progress of Politics; or Epistles, poetical and picturesque. Written by Toby Scout, Esq. a Member of the Opposition; and edited by Peter Pindar, Esq. Parts I. and II. 4to. 1s. 6d. each. Walker.

A lady, on being asked by Dr. Parr her opinion of his famous Spital sermon, instantly gave it by repeating the first words of the sermon itself, "Enough there is, and more than enough." In like manner, if we were called to decide on the merit of this satirical lucubration, we should repeat the first line of the title—*Great cry and Little Wool.* The satirist, of all other writers, should take care,

——————— *Ne*
Peccet ad extremum ridendus, et ilia ducat.

We feel for squire P. P. who has afforded us so much genuine entertainment; and if we now take the honest freedom of telling him that *Pindarus dormitat*, it is not with a view to discourage him, but to prevent his thinking (which every writer is apt to do when his reputation *is up,*) that any thing from his pen will be acceptable. Courts, favourites, ministers, and the panders of power and state-intrigue, are regarded as fair subjects of satire; and those who cannot obtain high stations have a gratification in laughing at those who fill them. To this modern Aretine,

"Satire is no more difficile
Than to a blackbird 'tis to whistle;"

and the expectations, which were raised in certain individuals by the illness of the King, are ridiculed much after P. P's old manner, in the first part: but when, in the second part, he follows Mr. Pitt into his late retirement (or supposed retirement) from state intrigue, to the humble study of military tactics; when he attempts to involve the Minister in derision by telling us that his feats as a soldier consisted in

* Sir Sidney Smith.

'killing a ram cat, attacking a dung hill, taking a bog-house by storm, stabbing an old sow, putting a score of oxen to rout, rending the stump of a tree, and cutting off the head of a mushroom.' we try in vain to laugh, and we only perceive that to be absurd is not always to be witty.

P. P. deals about his love and his hatred, his compliments and his sarcasms with a liberal hand. One of the Epistles is devoted to the subject of the P—— ss of W——s, and the stanzas are elegant and flattering. As the prime part of this production, we shall extract the Epistle entire for the gratification of our readers:

'O FRIENDSHIP, thy sighs I revere!
Sweet balm on the heart that has *bled!*
O LOVE, what a treasure thy tear!
A rich pearl on the tomb of the dead.

'How d'ye relish this *flight?* rather *rare*,
And *sublime* for the *lead* of these days!
And now let me talk of a FAIR,
Sweet object of pity and praise.

'To BLACKHEATH when the messenger came,
And announc'd the small hopes of a cure,
He expected a smile from the DAME,
With a purse for his news, to be sure.

'When she put her white hand to her pocket,
He thought some rare gift would appear.
Ah! her handkerchief only!—She took it,
SWEET MOURNER, to hold a fond tear;

'A tear to which FRIENDSHIP gave birth,
And LOVE, of the PASSIONS the QUEEN;
Pure pearl! had it dropp'd to the *earth*,
In treasure how *rich* it had been!

'When he said that the LITTLE and GREAT,
That KINGS, like their subjects must die;
She look'd *up* with a visage *so sweet*,
Bade *farewell*, with *so* tender a sigh!

'Her fate is uncommonly cruel—
Yet a lustre she casts on her race—
By the LORD, COUSIN NIC, she's a jewel,
And her *heart* is as fair as her *face*.

'But SCANDAL has always her *mud*,
At MERIT, *poor* MERIT, to throw;
Of ink has for ever a flood,
To blacken a bosom of *snow!*

'Sweet STRANGER! from splendor withdrawn,
On Wisdom and Charity bent,
To HEALTH, and the breeze of the lawn,
To the cottage of PEACE and CONTENT.

'COUSIN

'COUSIN NIC, with the subject I'm fir'd—
Yes! I've really drunk *deep* of the stream;
Yet a *Goose* must be really inspir'd,
When the VIRTUES and LOVES are the theme.'

P. P. by profession is a satirist, but his forte is the soft and pathetic. Mo-y.

Art. 19. *An instructive Epistle to John Perring, Esq. Lord Mayor of London*; or the Proposal of an Address of Thanks to the Right Hon. Henry Addington, for his great and upright Conduct when Prime Minister. By Peter Pindar, Esq. 4to. 1s. Walker.

Mr. Addington would not be displeased with such an Address as P. P. has prepared; for while it neatly compliments him, it finishes with a sting in its tail against those who have succeeded him in office. Perring and Peter being both Devonshire men, the poet concisely sketches and contrasts their respective destinies:

'*Thy* Planet led thee to the EAST,
To fill with precious gems thy chest,
And *eke* with precious ointment:
Mine WESTWARD order'd me to roam,
And, after years, come loaded home
With *sterling* DISAPPOINTMENT!

And yet I'm not a *broken* spirit;
The PUBLIC has observ'd my merit,
As well as INDIA *thine*;
To which kind PUBLIC, low I bow—
Its *candour* and its *taste* allow;
For gratitude is mine.'

If P. P. should suspect that our diminished civility to his verse may be a source of disappointment, we hope that it will be *sterling* disappointment; which will give him good interest in his future intercourse with the Muse. Do

Art. 20. *Il Fiore della Poesia Italiana*, &c. *i. e.* A choice Collection of Italian Poetry of the 18th Century, to which are prefixed some Historical Notices of the Poets, whose Writings compose it. The whole selected and compiled by G. B. Cassano, Professor of Languages and Italian Literature. 2 Vols. 12mo. 10s. 6d. Boards. Dulau and Co.

Among the various departments of literary traffic which have been carried to an unreasonable extent, is that of cutting the production of eminent writers to pieces, and serving up the garbled morsels under the title of Flowers, Anthologies, Spirit, Beauties, Selections, Extracts, &c.; and this species of book manufactory is least of all pardonable, when exercised on obscure or uninteresting materials. Taste and judgment are alike requisite to enable us to cull with profit and discernment from the multiplied store of literature and science. The object of the present collection is perhaps too limited to afford much gratification to the accomplished votaries of the muses. During the last century, Italy was not fertile in poets of the first order. She

boasts indeed of Metastasio: but his compositions are more justly celebrated for harmony of language than originality of invention or warmth of sentiment; and the specimens, which have been inserted in this collection, are not the best that might have been selected. In justice, however, to the publisher, we may remark that the comparative scarcity of Italian collections in this country may have prompted his efforts, that several of the extracts are worthy of quotation, and that the text is very correctly printed. Two or three of the small pieces may amuse our readers.

L' AGITAZIONE.
DI FILOMARINI.

'*Ruscel che mormori*
Aura, che spiri
Sai, se si aggiri
Quà il caro ben?
Ahi l'aure fuggono?
Ahi passa il rio!
Qual pena, oh Dio!
M' Agita il sen.'

AGITATION.
BY FILOMARINI.

Murm'ring streamlet, sighing gale,
Moves my fair one in this vale?
Ah! the gales in silence die,
Ah! the streamlet passes by.
Ah! in vain I sigh for rest!
Tumult wild distracts my breast.

A UN FRATE.
EPIGRAMMA DI PANANTI.

'*Pentiti, a un dissoluto moribondo*
Disse un Frate, perchè
Ho delle scale in fondo
Visto il Demonio che venia per te.
E sotto qual figura?
D'un asino.—Eh badate
La vostr' ombra v'avrà fatto paura.'

ON A FRIAR.
AN EPIGRAM BY PANANTI.

As a dissolute wag lay dying in bed,
"Repent, I beseech you," his good beadsman said:
"For, to tell you a secret—below in the hall,
The devil just now did my senses appall."
"And under what likeness?—"
"Why that of an ass,"
"The fear of your shadow,—so let the joke pass."

The biographical notices are very slight and meagre.

Muir.

MEDICAL.

Art. 21. *Advice to Mothers, on the Subject of their own Health, and on the Means of promoting the Health, Strength, and Beauty of their Offspring.* By Wm. Buchan, M. D. Fellow of the Royal College of Physicians, and Author of Domestic Medicine. 8vo. pp. 418. 6s. Boards. Cadell and Davies.

This publication displays much good sense and benevolence. The author strenuously maintains the propriety of a careful attention to the dictates of Nature, in the various circumstances of mothers and children; and he contends against those injurious, though too common prejudices, which still exist on the management of children, and on the subject of female health.—We shall give a general view of the plan of this work, which we may with great safety recommend to the careful perusal of the judicious parent.

The first, second, and third chapters are particularly directed to the conduct of women before marriage, and during pregnancy and childbirth.

birth. The disadvantages arising from the present fashionable mode of living are forcibly pointed out; while regularity, temperance, and a regard to every thing which may preserve the general health, are strongly inculcated. Dr. B. is disposed to prefer the employment of female midwives, because, as their time is less valuable than that of men, they are less likely to give a scanty and hurried attendance: but he requires that they should possess a licence to practise, founded on proofs of real qualifications. The use of cordials in child-birth is strongly and properly reprobated.

Dr. B.'s observations on the Nursing and Rearing of Children, in chap. iv., are divided into Remarks on the Influence of Air; on warm and cold Bathing; Dress; Use of Medicines; Food; Exercise and Rest. The early and indiscriminate use of the cold bath or washing is considered as highly injurious to the delicate frame of the infant; and he is decidedly of opinion that the temperature of the water employed should at first be that of the body, and be very gradually lowered.

Cleanliness is particularly necessary in the persons and linen of children: but nurses are generally too fastidious about the removal of that slime, which covers the bodies of newly-born children, and which easily comes away after three or four washings with a soft sponge and warm water, with a little soap in it.

With regard to dress, it should be simple and easy, and every kind of pressure should be studiously avoided, as tending to produce convulsions and other serious complaints. 'The only part of an infant's dress or covering, which may be applied pretty close, is a broad piece of thin flannel round the navel, to guard against any protrusion there, from the accidental violence of the child's cries. But take care not to make the pressure too tight, or you will not only hurt the bowels, but, perhaps, cause, in another place, a much worse rupture than that to which your precaution is directed.'

The purging off the meconium by medicines is a favourite but very hurtful and unnecessary practice; because Nature has given the first secreted milk a laxative property, which answers the purpose of discharging that substance much better than the productions of the apothecary's shop. Children should not be continually crammed with food; the mother's milk is at first the only nourishment which should be given to them: but pap may be gradually introduced, so as to prepare the way for weaning. 'The mother, after delivery, should be indulged with a few hours' sleep, to recover from the fatigue which she has lately undergone, and to allow due time for the secretion of the milk, before the infant is put to the breast. The child can suffer no inconvenience from this delay. Being replete with blood and juices, he has not the least occasion for any fresh supply of nutriment, till the mother is prepared, by necessary repose, to give him the grateful and spontaneous beverage.'

The remaining chapters of this useful work are occupied with Considerations on Dwarfishness and Deformity; on the baneful Effects of a delicate and enervating Education; on Employments unfavourable to the Growth and Health of Children; on Accidents; on Foundling

ling Hospitals, and other charitable Institutions for the rearing of poor deserted Children; and in giving a Sketch of a Plan for the Preservation and Improvement of the Human Species. In this last, the author recommends, as an encouragement to the rearing of healthy children, that a premium should be granted annually to every mother, in proportion to the age and number of healthy children brought up by her. An Appendix contains a principal part of Dr. Cadogan's Essay on the Nursing and Management of Children, which is now scarce.

Art. 22. *Discourses on the Management of Infants, and the Treatment of their Diseases.* Written in a plain and familiar Style, to render it intelligible and useful to all Mothers and those who have the Management of Infants. By John Herdman, M. D. 8vo. pp. 127. 2s. 6d. sewed. Johnson.

We have here the first of four discourses, which the author has written on the management of infants and the treatment of their diseases. It contains directions for the attentions necessary during the periods of nursing and weaning. The second discourse will treat of the Causes, Symptoms, Nature, and Cure of Infant (infantile) Diseases; the third, of their contagious Diseases; and the fourth, of the Management of their mental faculties and Passions.

Dr. H.'s view of the proper conduct during the periods of nursing and weaning agrees very nearly with that of Dr. Buchan on the same subject, which we have noticed in the preceding article. We have only therefore to express our hopes that the creditable exertions of this author, and of others who strenuously contend against those prejudices which still maintain their ground respecting the management of infants, may prove successful.

The present discourse is not altogether free from occasional Scotticisms.

MISCELLANEOUS.

Art. 23. *A Compendious Treatise of Modern Education,* in which the following interesting Subjects are liberally discussed: The Nursery, Private Schools, Public Schools, Universities, Gallantry, Duelling, Gaming, Suicide. By the late Joel M'Cringer, D. D. F.R.S. A.S.S. Rector of the united parishes of Pigworth, Goosebridge, and Honeytown, in Middlesex—Vicar of Cornstead-cum-Haybury, in the same county—Prebendary of St. Glebemore—Whitehall Preacher, and Domestic Chaplain to the Right Honorable Lord Trainwell. To which are added, coloured Designs, both characteristic and illustrative, delineated by J. B. W******* Esq., and etched by Thomas Rowlandson. Long Folio. 1l. 1s. Boards. Miller.

Geoffrey Gambado, by being Master of the Horse to the Doge of Venice, could not have been better enabled to write a treatise on Horsemanship, than the Reverend Pluralist, whose successes in life are exhibited in this title page, must have been fitted to inculcate the principles of education. Indebted for elevation to qualities which cannot be suspected of any connection with morality, the Doctor does not profess a partiality for any of those sentiments which are termed virtuous. He is not alarmed at vice like some unaspiring squeamish

squeamish preceptors, but undertakes to point out how much of this ingredient enters into the composition of Modern Education. To prepare us for so beneficial a discovery, he thus translates Juvenal's '*Nemo repente fuit* turpissimus." "*No one can become a* COMPLETE GENTLEMAN *at once*;" by which we are put on our guard against the declamations of moralists; and apprized that what the antients rejected as the *turpe* we must teach our children to cherish as the *pulchrum*, if we would have them to be men of *finished* education. Now this most sage and important information must induce us to recommend Dr M'Cringer as a preceptor, with all the zeal which we should exercise in behalf of our old friend Gambado as a riding master. To form a *complete Gentleman*, early cruelty, early debauchery, drunkenness, gallantry, *disease*, duelling, and gaming, are *most indispensably* necessary; and to render the picture exactly what it ought to be, suicide must crown the whole. Can any loving parent, then, refrain from wishing that his son may become a *complete Gentleman*? Who can even look at the designs which embellish and illustrate this precious fragment (for alas! the observant M'Cringer was prevented by death from finishing his sagacious treatise); who can observe the orderly treatment of the child in the nursery; the harmless amusements of the boy at the private seminary, and his sober exploits at the public school; his manly studies at the university, his proficiency in gallantry, and his mode of honorably killing without murder, his contempt of sordid wealth by risking all on the throw of a die, and his prudent method of escaping poverty by killing himself; who can survey all this without expressing due thanks to Dr. M'Cringer and his friends for their hints and advice; which, if *properly* understood, and *well digested*, may do as much good as some more elaborate and vulgar performances. We have only to add that the Doctor, having been what is called "a *knowing one*," the reader must take it for granted that he is fond of "*quizzing*."

Art. 24. *L' Italie et L' Angleterre*, &c. *i. e.* Italy and England,—each considered in one of her Children. 8vo. 2s. Clarke.

Such is the fantastical title of this small morsel of criticism. The children of the respective countries are Michael Angelo and Shakspeare, between whose excellencies and defects the author hints at real or fancied analogies. He cannot, however, dissemble that the Italian artist was indebted for his celebrity to the study of the antique; and that the bard of Stratford depended wholly on the resources of native genius; or, to copy the writer's own terms, on "spontaneous infused intuition." We will not say that this essay, which is ascribed to the Comte de Catuelan, is *vox et præterea nihil*, but it certainly displays more turgid *verbiage* than accurate and discriminate appreciation of two of the greatest geniuses who have adorned the world.

Art. 25. *Flowers of Literature*, for 1801, 1802, and 1803; or characteristic Sketches of human Nature and human Manners. To which is added a general View of Literature during that Period. With Notes Historical, Critical, and Explanatory. By the Rev. F. Prevost, and F. Blagdon Esq. 2 Vols. 12mo. 11s. Boards. Crosby and Co.

Readers

Readers of a versatile turn, who find it difficult to fix their attention for any time to one subject, will here obtain a relief for their wandering fancy, and a choice variety to amuse their leisure hours. Such reading, however, we consider as of no other advantage than the amusement of the moment; since new images, presented so rapidly to the imagination, make no lasting impression. Like the vision of the kings in Shakspeare, another and another comes; and when the volume closes, the reader arises from his sofa with the faint traces on his recollection, as it were, of a dream.

The introduction gives a cursory view of the more noted publications of the day; and we observe that the editors have occasionally done us the honor to adopt our remarks on the merits of some of these performances. Several notes accompany the extracts, and will be found worth perusal; and a few articles occur, which have not previously made their appearance in print. Man.

EDUCATION.

Art. 26. *Practical Arithmetic,* or the Definitions and Rules in whole Numbers, Fractions vulgar and decimal, exemplified by a large Collection of Questions relative to business; including Rules and Examples of mental Calculations, and Abbreviations in most Parts of Arithmetic, with Notes. Adapted to the use of young Ladies, as well as young Gentlemen. By J. Richards, 12mo. 2s. 6d. Bound. Seeley.

This book contains a great variety of examples, sufficiently appropriate, and is offered to the public at a cheap rate. The author has judiciously introduced several tables, for the values of annuities, &c. but we wish that he had farther extended his plan of mental calculation. The aids of which the mind avails itself, in such calculations, are derived from the principles of the Science, reflect light on those principles, and create a habit and adroitness in compounding and decompounding. Persons in ordinary life, ignorant of reading and writing, calculate mentally; and an attention to the process which they carry on will often more illustrate the nature of arithmetic, than written elaborate elucidations. Mr. R's book seems well adapted to answer the purpose for which he intended it. R.W.

Art. 27. *Dialogues Enfantin:* Juvenile Dialogues, in short and easy Words, to facilitate the reading of French. By the Countess de Fouchecour. Small 12mo. 1s. Highley.

It may be doubted whether any advantage is likely to accrue from placing the corresponding English on the opposite pages of books of education; especially when, as in this instance, it does not closely accord word for word with the French. It will probably lead the beginner to mistakes, which he must afterward take some trouble to correct. These dialogues are in other respects suited to the capacity of early youth. Man.

Art. 28. *A General Table of the French Verbs,* regular and irregular: by which the Formation of any Tense or Person required may be immediately found. By R. Juigné, M.A. of the University of Paris. Folio Sheet. Dulau and Co.

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The method which Monsieur Juigné has adopted for this table of the French verbs is very clear and distinct; and we are inclined to think that it will be found of great service to the pupil, as soon as he is familiarised to the mode of consulting it. The only objection is the magnitude of the sheet, which requires rolling and unrolling, and is not so readily handled as a book. The antients used parchment rolls of this kind: but our modern form of binding is much more convenient.

Art. 29. *A Genealogical Table of the different Parts of Speech adapted to the French Language.* By R. Juigné, M. A. Folio Sheet. Dulau and Co.

The utility of this table is not so apparent as the former; and we much suspect that it will rather tend to puzzle and perplex the young grammarian, than to bring him acquainted with the different parts of speech.

Art. 30. *A Concise Treatise on the French Tongue,* &c. &c. By R. Juigné, M. A. 12mo. 2s. Dulau and Co.

This composition will certainly conduce to obviate the objections to the genealogical table; and it is well arranged, and very neatly printed. The distinction of different conjunctions, however, as *illative, causal, expletive,* &c. &c. is rather too refined and minute for a young pupil: but, in most of these matters, almost every thing depends on the felicity of manner with which the teacher unfolds these arcana of grammar.

Art. 31. *A Family Tour through the British Empire;* containing some Account of its Manufactures, Natural and Artificial Curiosities, History, and Antiquities. Interspersed with Biographical Anecdotes. Particularly adapted to the Amusement and Instruction of Youth. By Priscilla Wakefield. 12mo. pp. 450. 5s. Boards. Darton and Harvey.

A great variety of pleasing and useful information will be found in this volume; and either for those who travel through different parts of the British Empire, or for those who seek at home for some acquaintance with their own country, this tour will prove a very authentic and instructive manual. Aided by the publications of modern tourists, Miss W. has with great discernment and felicity compressed into one volume the principal circumstances worthy of note, which are diffused over so large a field in other treatises. A very neat coloured map, and drawn, considering the price of the volume, on a larger scale than could have been expected, is prefixed; and it contributes to render this work, as the fair author expresses a hope that it may be found, a very valuable addition to a juvenile library. A similar tour through the metropolis of England is promised by Miss W. as a sequel to this undertaking; and we shall be happy in having another opportunity of introducing to our readers the journal of so attentive and judicious a tourist.

SINGLE SERMON.

Art. 32. Preached before the Society for the Suppression of Vice, in the Parish Church of St. George, Hanover-Square, the 3d of

May 1804. By Richard Watson, D.D. F.R.S. Lord Bishop of Landaff. To which are added The Plan of the Society, a Summary of its Proceedings, and a List of its Members. 8vo. 1s. Cadell and Davies.

Among all the Bishops and Archbishops of the Christian world, perhaps no individual possesses a mind more vigorous by nature, or more expanded by genuine science, than Dr. Watson; from him, therefore, it would be a kind of miracle to hear a bad sermon. The composition now before us, drawn up for the occasion specified in the title, embraces subjects of great moment, and which the Bishop of Landaff has discussed with perspicuity and energy. Within the confined limits of a discourse, it was impossible for him to display at length the influence of national prosperity, and a crowded population, in corrupting the morals of a people; and to suggest the best means of correcting, or at least of counteracting, that influence: but he has stated the fact itself in a very striking manner; and by sanctioning with his approbation the proceedings of the Society for the Suppression of Vice, he manifests his persuasion of the fitness and beneficial tendency of the measures which it has adopted. The first period of the discourse contains an exhibition of an evil over which Moralists have mourned, and for which it is no easy matter to find a sufficient cure:

'Great cities have been properly called the Graves of mankind; and they may with equal propriety be called the Sepulchres of Virtue; the Nurseries of Vice; the Hot beds of Corruption, physical, political, and moral.'

When mankind are assembled in large masses, they always corrupt one another. Between extreme affluence and extreme poverty, every vice is generated of which human nature is capable; while the pride of the former, and the abjectness of the latter, render the one regardless of reproof, and the other insensible to shame. When such is the state of Society, what is to be done to reform it? For its amelioration, it is necessary to convince its members of the importance of religious principle, to lessen the contagion of vice, to increase the means of becoming virtuous, and to maintain a rigid execution of the law against all who are irregular, riotous, and disorderly. The Bishop justly observes, in reference to those moral establishments in Society which would conduce to diminish its evils, that 'a tenth part of that treasure which is annually expended, by the different States of Christendom, in unchristian warfare, would supply for ever the expense of establishments in every country, in which the morals of thousands would be amended, their idleness changed into industry, their profligacy into sobriety, their lives preserved for the public good, and the peace of Society maintained.' To urge the well-disposed to exert themselves in concert with the Society to whom the discourse is addressed, he farther remarks that 'he who lessens the vice of his country does more for its prosperity than he who augments its wealth.—To lessen the vice of a nation, is to procure for it the protection of Heaven; whilst to augment its wealth is, ordinarily speaking, to augment its wickedness.'

It is no doubt a lamentable truth that, in several respects, the manners of the people of this country have obtained an ascendancy over

over its laws; and that Fashion and the example of the Great are of more weight than the prohibitions of the Statute-book. The Bishop instances Duelling, Gaming, Profanation of the Sabbath, and Oaths of Office, (he does not mention Ordination oaths, which might have been fairly put in the list,) and hence he infers that 'the laws are fallen into contempt, and *require the zeal, the activity, the discretion of such a society as this to renovate their vigour.*' Laudable, however, as we deem the intention of this Society to be, we are not sure that the renovation of the vigour of the laws should be left to the discretion of its individuals; since in some cases they may exert "a vigour beyond the law," and in others no vigour that is effective. Instances may happen in which, under the notion of suppressing vice, a kind of persecution may be inflicted: but we trust that the Society will be on its guard, and distinguish between practicable and romantic reformation.

Mo-y.

CORRESPONDENCE.

'*To the* MONTHLY REVIEWERS.

'Imperfectly as ye profess to be acquainted with the discipline of the Quakers, no wonder that ye have been led to understand that its whole spirit (M. R. Aug. 1804, p. 430.) points to the formation of a society, &c. As their affairs of church and state (unnatural mixture!) unitedly make up the discipline, there is not any 'whole spirit' to actuate the system. It has varied from the beginning according to the circumstances of the times, and the dispositions of the leaders, pillars of the society. In parts it is peaceful, philanthropic, evangelic, heavenly; in others it is mistrustful, uncharitable, superstitious, altogether worldly, and, in its effects, most miserably misanthropic. The Separatists in Ireland, 'too much Quakers for the Yearly Meeting of London,' (M. R. Nov. 1803. page ult.) much redeemed from this latter spirit, have not conceived the discordant idea, that a human being who may be already prepared 'for the kingdom' is yet unfit to become united to their families by marriage. A youth, of no sect, attached to one of these philosophic females, is not only kindly received by herself (I speak what I know) but by the Brethren, who cordially attend at the solemn covenant, without entertaining the notion of a fanatical Quaker or a Jew, that the marriage is '*mixed.*'

'J. W.'

'Salisbury Square; 11, ix. 1804.'

A Correspondent, who signs his letter 'A Lover of Truth,' seems, by the strain of his note, to have united himself to one of the two parties to which Vaccination has unfortunately given rise; and he cannot therefore be regarded as free from a portion of that prejudice which he supposes to attach to his opponents, and which in many cases has been applied to the adherents of both sides of the question We know but little of the private character of the individual to whom he alludes, yet we are sufficiently acquainted with it to be convinced that many

many of the assertions made by the letter-writer are ill founded. We are still not aware that any material fact, connected with the history of Cow-pox, has been omitted in the work in question; and we should have expected that our Correspondent would have instanced the gross omissions to which he refers, instead of indulging his personal feelings at the expence of his candour.

Yell.

We cannot very lowly bow to the expostulation of our fair Correspondent, *l'Amie de la Décence*; because we regard it as too serious and too little warranted. The testimony of all our long labours will shew that we ever regard the laws of decorum: but prudery must not always operate to the exclusion of matters of science, or of the traits of national character. In the case in question, both these objects were concerned.

The Rev. H. Whitfield requests us to correct the surmise introduced into our last Number, p. 424, by stating that he is *not* the author of the Novel intitled *Leopold*.

'*Inquisitor*' (whom we think we recognize) attempts to tax our pockets and intrude on our time: but he has no right to do either. The Post-office shall in future take care of us in one respect, and we shall take care of ourselves in the other.

We are much obliged by the friendly offer of A. Y.: but, on considering all the circumstances of the case, we are induced altogether to decline the subject of his letter.

We should have realized the 'hopes' which we held out to Mr. Pye, before this time: but the truth is that, after having long sought for his work, we can nowhere find it; and if it was ever received, it has been irrecoverably mislaid.

Mr. Wakefield's political tract has not yet reached our hands.

Our Correspondent at Belhaven Barracks is informed that we have on our table the publication to which he refers, and that we intend to give an account of it at an early opportunity.

The object of 'a Constant Reader's' solicitude will not be overlooked.

*** The APPENDIX to Vol. XLIV. of the Monthly Review is published with this Number, and contains a variety of articles respecting curious and interesting *Foreign Books*.

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Errors. pp. 58, 83, 87, 99, 106, 109.